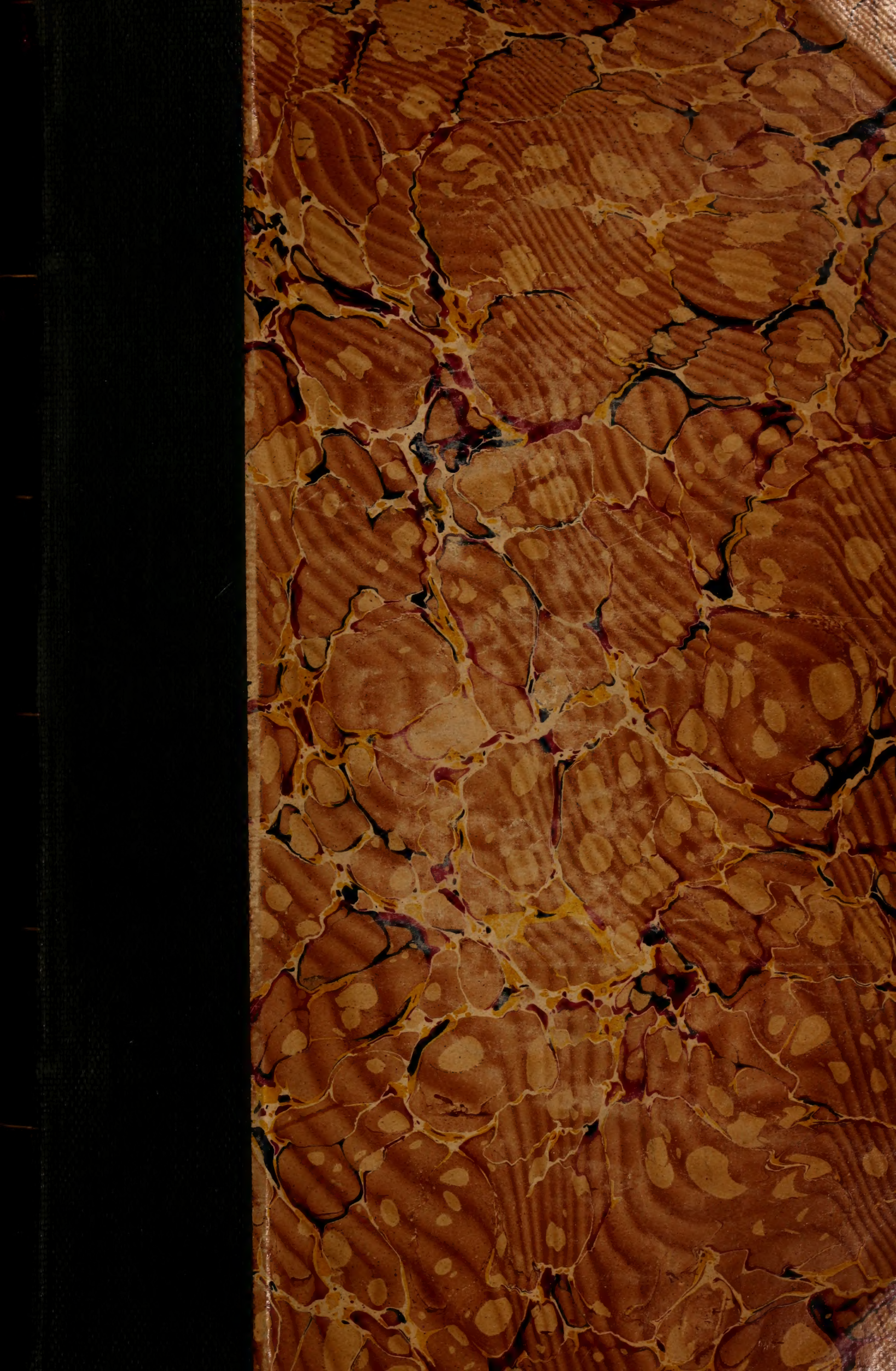




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BUFFALO MEDICAL JOURNAL

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No. 1

Compound Fractures¹

By THEW WRIGHT, M.D.

Attending Surgeon Emergency Hospital

Assistant Surgeon Buffalo General, Erie County, and Children's Hospitals
Buffalo, N. Y.

Instead of taking up your time in the consideration of the popular surgical topics of the day, I am going to ask your attention for a few moments upon a subject as old as the art of surgery, as interesting as you choose to make it, and as important as any with which we are called upon to deal. I know of no branch of surgery in the practice of which versatility, ingenuity, conservatism, quick decision and good judgment are more essential to the securing of good results than in the treatment of compound fractures. To be sure these injuries have lost much of the dread with which they were viewed before the introduction of Lister's methods, when the surgeon's choice lay between primary amputation and death from infection, and when primary amputation often failing to save life the mortality from compound fractures was between 40 and 50%. With the introduction of antiseptic methods the mortality decreased to less than 10%. But these injuries still remain, perhaps, the most important division of traumatic surgery.

Compound fractures are defined in many ways. A satisfactory definition is that a compound fracture is one in which there is a more or less direct communication between the seat of fracture and the external air through a wound in the skin and soft parts. This communication may be brought about by the force which causes the fracture lacerating the soft parts on its way to reach the bone, or one of the fragments of the bone may produce the laceration. A fracture may be simple at first and become compound secondly, either by faulty handling allowing jagged bone ends to pierce the skin or by anything which will cause a dissolution of the continuity of the soft parts overlying the fracture, as for example the infection of a blister.

Every step in the treatment of these injuries is of importance and in order that our discussion may follow in logical sequence

1. Read before the Central New York Medical Association, November 18, 1911, and the Erie County Medical Society, April 22, 1912.

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let us consider for a moment the question of "first aid." That is, what shall we do and what shall we not do if called to such a patient on the street in the factory or on the road. The clothing should be cut open with a knife or shears so that it may be readily removed without being rubbed and dragged across the site of injury, thereby adding to the probability of infection. A compound fracture may be considered as an infected wound in practically every instance. It was this fact of the presence of infection of course which made these injuries so formidable in the preantiseptic era. But care must be taken not to add to the infection already present. After the wound is exposed it should be covered with sterile gauze, if such is at hand, or if that is lacking, with the cleanest available cloth, which should be snugly bandaged in place. Should severe hemorrhage persist in spite of this, it may be necessary to apply a tourniquet.

The extremity, if it be one, should now be immobilized in a pillow, blanket or board splint, usually without attempt to correct the deformity which may be present and always without such attempt if a fragment of bone is protruding from the wound. The reduction of such a fragment before it is thoroughly cleaned may readily cause the introduction of infectious material into an otherwise comparatively clean wound. There should be no handling of the wound at this time and the immobilization should be so complete that there is the least possible disturbance to the injured part during transportation to the patient's house, the doctor's office or, what is always the best place for such injuries, the hospital.

If the fracture be of an extremity, the first question that arises is, can the limb be saved or will it require amputation? This is a question that often cannot be answered at this time. I have seen limbs apparently hopelessly crushed which were saved and ultimately restored to usefulness. Unless the force which caused the fracture has cut off all the principal arteries supplying the part, I believe a primary amputation is never justifiable and that in the vast majority of cases, with proper treatment, the part will be saved. I have never primarily amputated an extremity in which there was any demonstrable arterial circulation and altho a subsequent amputation has been required in some cases, there have been enough instances in which this was not the case, that I feel that we cannot easily be too conservative in the matter. If the points upon which I shall touch are carefully carried out we have very little to lose by conservatism and usually much to gain.

To be sure there are cases of compound comminuted fractures, especially of the foot and ankle, where we can be sure that even though the part be saved the best possible outcome, even after

months of treatment, would leave a member so distorted and deformed as to be no better than an artificial limb. In such a case primary amputation should be done. This will be more often justifiable in the leg than in the forearm, for the loss of the hand is a far more serious matter than that of a foot in these days of excellent, prosthetic work and it is justifiable to run great risks in the effort to save it. Having decided against amputation the next step is to render the injured part as nearly sterile as possible. This to my mind always means the administration of a general anæsthetic, unless we are dealing with a fracture of a phalanx, in which case local anæsthesia either by immersing the part in warm carbolic solution or by injecting cocaine will often suffice.

The thorough cleansing and primary dressing of a compound fracture of a large bone can only be properly carried out with the patient asleep. Ether, always the safest anæsthetic, is especially indicated in this class of cases where preliminary preparation is impossible.

As to our method of attempting to sterilize the injured parts I feel we can not be too dogmatic in our statements. I feel that here, as in other fields of surgery, we must suit our methods to the individual case at hand. The man who says he always does this or always does that will oftentimes err, not in judgment for the very fact that he always follows a routine precludes the use of judgment. Right here in the choice of methods of sterilizing the wound we are called upon to exercise most careful judgment.

There are men who say, always scrub the skin thoroughly with soap and water, then scrub the wound in the same manner. Others say, never scrub either one or the other, but rely upon our best antiseptic iodine to sterilize.

In deciding the method to be used we must take into consideration the way in which the compound element of the fracture was produced as well as the extent of the laceration of soft parts. If the lesion to the soft parts was produced from without inward we have certain infection of the wound, the extent of which varies with the amount of foreign matter carried into it. If the wound was made by the protrusion of the bone end we have probably no infection in the wound and if we can thoroughly disinfect the surrounding skin, and the bone end before replacing it we will have none at any time. In this latter class of cases the best results will be obtained by cleansing the surrounding skin with gasoline and then applying iodine, treating the protruding bone end in the same manner. If we find dirt ground into the bone end, and this cannot be easily removed, it will be wise to clip or rongeur away the soiled surface and

then apply the iodine to it. The fragment may then be replaced, a sterilized gauze dressing applied and in the vast majority of cases healing will be prompt. It must be admitted that the body can take care of a considerable amount of infection and that in the majority of cases the local reaction will overcome infection unless it be of an especially virulent type. None the less, in my opinion we are always running a risk if we suture or primarily close the skin over a compound fracture, and it will be far safer if we insert a small strip of oil silk or gutta percha as a drain.

Instead, however, of merely replacing the fragment, in many cases it will be wiser to enlarge the wound by incision, otherwise comminution of bone and accumulation of clot sufficient to cause trouble may be overlooked.

In the more extensive lacerated wounds produced from without inward it was formerly my custom always to carry out the following procedure: To cover the wound with a piece of sterile gauze in order to prevent washing the dirt from the surrounding skin into it, then to scrub the whole extremity thoroughly with green soap, water and brush and rinse it off with sterile water. To treat the wound in the same manner, to wash the limb including the wound with ether, thoroughly cleanse the wound with turpentine, swab it out with tincture of iodine and finally wash it out with alcohol.

Turpentine is an excellent medium for removing grease and grime from wounds and is also a good antiseptic. That this method of treating these wounds is efficient has been amply demonstrated by many surgeons. But as our knowledge of the possibilities of iodine has increased we have learned to rely more and more upon it. It is now the exception for me to scrub and irrigate such a wound. We have found that by far the best results are obtained in most accidental wounds by omitting all scrubbing and irrigation, which a few years ago were thought to be essential, and relying upon tincture of iodine to accomplish the sterilization of the wound, using forceps to remove foreign bodies and cutting away with scissors or knife all shreds of severely mutilated and evidently infected tissue.

Iodine properly applied accomplishes several things. First, there is no other antiseptic so slightly toxic which covers so wide a variety of pathogenic bacteria; second, it sears over the wounded surface, closing the ends of the small cut vessels and lymphatics and thus greatly limits the spread of infection. It is often impossible by any means at our command to render these wounds perfectly sterile, but tincture of iodine by inhibiting the growth of bacteria and by its action on the tissues prevents

the spread of infection from such small areas as may not have been rendered so.

In using tincture of iodine for skin disinfection the point has been made and is generally accepted that the skin must be absolutely dry. This is because water causes the epithelium to swell and thereby prevents the deeper penetration of the drug. This objection does not apply to the case of irrigation of the deeper tissues for by the very nature of things we are dealing with wet structures—I therefore feel there are occasional cases where the method outlined will give better results than when washing is omitted. That is, cases where we have a large amount of foreign material carried into the wound. But as a routine measure I think it should be discarded. In order to get at pockets containing dirt it is often necessary to enlarge the wound in various directions and to trim lacerated skin edges and even cut off portions of muscle and fascia.

After thoroughly disinfecting the wound it should be carefully inspected to determine the exact condition of the fracture. This should be done with as little handling as possible and the surgeon should wear gloves. Many wounds have been first made septic by the careless handling of the over-enthusiastic surgeon. Torn vessels should be ligated, and tendons, nerves, pieces of fascia, or muscle should be carefully removed from between the bone ends. Loose fragments of bone, i. e., those detached from their periosteum, should be removed. We must now decide how much to do in the way of repairing torn nerves, tendons, muscles, and fascia, as well as how to drain, (for I believe we should always drain.) Regarding the first point I would say that we should be governed by the amount of laceration and evident infection. If the tissues are badly crushed and dirt and grime have entered the wound in considerable quantity the less plastic work attempted the better for in the presence of infection it will fail and much plastic work may materially increase the primary shock. Any unnecessary manipulation of such wounds increases the danger of sepsis and may add just enough to the insult already done the tissues to turn the tide against recovery.

In such cases our entire effort should be directed toward saving the limb and getting as good bony apposition as possible. I feel sure that efforts to do too much at the primary dressing have frequently been the cause of secondary amputations. Plastic work can well be deferred until a later date when the wound has been healed sometime and the tissues have regained their vitality. Above all things there should be no attempt to better bony apposition by the introduction of foreign bodies, such as silver wire, bone plates or splints. In the first place good ap-

position can as a rule be obtained without such means. But even if this is not possible it is far wiser to wait until the wound has healed and then perform whatever operation may be necessary.

The manipulations which necessarily accompany the introduction of bone plates, wires, etc., as a primary procedure will often make the wound septic if it is not already so. They will often add such additional trauma to the partly devitalized tissues and so further damage the circulation as to necessitate amputation of a part that would otherwise have been saved. Furthermore bone plates and wire when introduced as a primary procedure, even when they do not produce such dire results as these, rarely accomplish the purpose for which they are used. They practically always act as irritants and cause more or less bone necrosis, are foreign bodies in the strictest sense of the word and preventing healing so long as present, must eventually be removed. During the past few years since Dr. Lane's procedure of operating upon simple fractures and the use of his bone plates have been received with increasing favor, there have been many instances in which, forgetting the principles he lays down for the application of his methods, surgeons have introduced these plates as a primary procedure. The first fundamental and by all means most important element in the successful use of bone plates or splints perfect asepsis, is practically never present in these cases. To the surgeon of experience these facts are familiar and mentioning them may seem superfluous, but I have so many times had to explain to the family doctor why I did not plate or wire in a given case that I presume on your good nature by calling attention to them. We must remember that our first efforts are to save the extremity in cases of severe injury and must ever be on guard against the temptation to do too much. How little it profits the patient to have a beautiful example of the joiners' art in a limb that he will eventually lose. Furthermore we must not be too ready to perform secondary operation. We should strive for good functional results rather than for a perfect restoration of bony outline as shown by X-ray, a thing rarely attainable and still more rarely necessary.

How much needless work the X-ray has caused it would be hard to estimate, but let us not be led too easily to attempt to better slight displacements demonstrated by it.

Now as to the question of drainage. I believe we should always drain these wounds. That is, we should allow free exit for the serum and blood that collects. We know that it is only when pus and the toxins it contains are under tension that

they cause appreciable harm. If we allow these wounds to be closed at once by clotting or skin-edge adhesion we seal a container of excellent culture medium and we produce the most ideal condition for the absorption of any toxins formed. With proper drainage we prevent the accumulation of this pabulum for bacterial growth, we allow the lymph stream to pour out serum which shall carry infection away and we prevent the absorption of toxins. It is rare to see any alarming toxemia from a wound that is draining freely. Some surgeons advocate no drainage until the signs of sepsis appear but this seems to me to savor too much of locking the barn door after the horse is stolen, and I feel that drainage plays an important part in prophylaxis in these cases. For material oil silk, gutta percha tissue, raffia, or occasionally the fenestrated rubber tubes are the methods of choice. Plain gauze only acts as a plug and soon defeats its purpose.

The next question is regarding the means of securing proper immobilization. This is made more difficult in this type of fracture by the necessity of so arranging our retention apparatus that the wound may be dressed without unduly disturbing the limb. As a rule I think this purpose is best accomplished by a fenestrated plaster cast. The wound is covered with a sterile gauze dressing, held in place by a gauze bandage. The limb is then wrapped in sheet wadding and a circular cast applied. After the plaster is set but while still soft, it should be split lengthwise to allow for spreading, if subsequent swelling of the limb occurs of sufficient extent to call for it. A window sufficiently large to permit of easily dressing the wound is then cut in the cast. In order that the removal of an area sufficiently large to allow easy dressing may not weaken the cast it will often be necessary to incorporate strips of metal or wood when applying the plaster. There are several ways of protecting the edges of the fenestrum from becoming soiled by the discharge from the wound, the simplest and best way I have found to be that suggested by Dr. Crouse, of El Paso, Texas. Sufficient dental rubber is dissolved in chloroform to make a thick mucilaginous paste, into this small pieces of lamb's wool are cut and thoroughly mixed. After cleansing the skin with ether the wool impregnated with rubber is tucked in between the edges of the cast and the skin. This makes an impervious and elastic dam which effectually walls off the wound area and allows the cast to remain sweet and clean in spite of profuse discharge from the wound.

Finally as a routine in every case of compound fracture antitetanic serum should be injected within a few hours after the injury. Without this prophylactic measure compound fractures vie

with Fourth of July injuries in the percentage of cases developing tetanus. Following its prompt use I know of no case in which the disease has developed.

Gentlemen, I thank you for this opportunity to address you upon this subject. It is one of great interest to me and one which has shared equally with any in the advances made in surgery during the past 40 years.

Cesarean Section.

GEORGE FOY, M.D., F.R.C.S.,

Fellow of the Royal Society of Medicine, London; Surgeon to the Drumcowra Hospital, Dublin; Hon. Mem. of the Georgian State Medical Society, and of the Clarke County Medical Society, Ga.; Honorary Member of the Southern Surgical and Gynecological Association.

HIDDEN away, out of the beaten track of tourists, in the north-west corner of Ireland, lies the city of Clogher, on the banks of the Launy river, a tributary of the Blackwater. The city is of deep interest to both the archeologist and antiquarian and to all who take an interest in Irish history. The foundation dates further back than runneth the memory of man. On its site by the Launy the early Celts found the Cloch-Oir or Golden-Stone, which came to possess oracular reputation and was consulted by the Druids for centuries before the Christian era. By the Cloch-Oir the chiefs of Eviyol swore fealty to the O'Neils, the Princes of Ulster.

Hither Saint Patrick came and taught his Celtic audience that all knowledge, all wisdom, all love came from the Rock of Ages. His words bore fruit and in 444 his flock built him his first cathedral. The Druids had gone and the Golden Stone was forgotten; but the name Cloch-Oir remained associated with the place.

The city grew rapidly; the cathedral was rebuilt in 1041 and in 1295; it contained an Abbey and an Episcopal Palace, the former of which was richly endowed and the latter stood in its own extensive and well-wooded domain. But the Rebellion of 1641, was destructive of the prosperity of Clogher. All its beauties other than the old cathedral of Matthew MacCaitsaid and his great peal of sweet toned bells are decayed, and a short street of some thirty poor houses is all that remains of the prosperous cathedral city. In January 1738-9, a dweller in the city, one Mary Donally, an illiterate woman, who had acquired some reputation as a handywoman was called on to attend Alice O'Neal, aged 33 years, wife to a poor farmer near the village of Charlemont, and mother of several children, who took her labour pains;

but who could not be delivered of her child by several women who attempted it. She remained in this condition twelve days; the child being judged to be dead after the third day. Mary Donally, on her arrival tried also to deliver her in the common way and her attempt not succeeding, performed the Cesarean section, by cutting with a razor first the containing parts of the abdomen and then the uterus, at the aperture of which she took out the child and secundines. The upper part of the incision was an inch higher, and to one side of the navel, and was continued about six inches downwards in the middle between the right osilium and the linea alba. She held the lips of the wounds together with her hand till one went a mile and returned with silk and the common needles which taylors use; with these she joined the lips in the manner of the stitch employed ordinarily for the *hare-lip*, and dressed the wound with whites of eggs, as she told Dr. Duncan Stewart, of Dungarsnon, (the original reporter of the case), some days after, when led by curiosity he visited the poor woman who had undergone the operation. The cure was completed with salves of Mary Donally's own compounding.

In about twenty-seven days the patient was able to walk about a mile on foot, and came to Doctor Duncan Stewart in a farmer's house where she showed him the wound covered with a cicatrice, where she complained of her belly hanging outwards on the right side, where he observed a tumour as large as a child's head; and she was distressed with the *Fluor Albus*, for which he gave her some medicines, and advised her to drink the decoctions of the vulnerary plants, and to support the side of her body with a bandage. The patient has enjoyed very good health ever since, manages her family affairs, and has frequently walked to market at Dungannou, which is six miles from her house.

Dr. Gabriel King, of Armagh, writing in 1740, refers thus to this case: "There is a woman living within five miles of this place (Armagh), from whom a midwife took a child by the *Cesarian* operation near two years ago. I saw the poor woman soon after and drew out the needles which the midwife had left to keep the lips of the wound together." And he adds: "This child was not extra-uterine for several besides the midwife assured me that a leg of it presented itself to view in the vagina before the operation."

The delivery of an extra-uterine foetus by the operation of laparotomy in which the operator was a butcher named O'Neil, which took place in the village of Prentrian, two miles from the city of Clogher, in 1640, is thus reported by the Rev. Dean Copping in the *Philosophical Transactions*:

"Sarah McKinna was married at the age of sixteen years. Ten months after her marriage, she found the symptoms of pregnancy and bore a child at the expiration of the usual time. Ten months after she was delivered of another; and each time had a speedy and easy delivery. Two months after her second delivery, symptoms of pregnancy appeared again, and increased in proportion to the time; but at the end of nine months those symptoms began to abate; and in a little time, she had no other reason for thinking she was with child, but the absolute stoppage of the catarmenia. Nor had she, during the space of six years and some months, any one return of them; but for the greatest part of that time, especially the first four years, she was perpetually afflicted with most violent pains in the middle region of the abdomen.

"Sometime in the event of her last pregnancy, which ended in such a usual manner, a swelling in her belly and other symptoms made her conclude she was again pregnant. About seven months after this uncertain account, a boil, as she thought, appeared about an inch and a half higher than her navel. During this time of her pregnancy she often found the symptoms of her being quick with child, till about six weeks before this boil, so she called it, appeared. It was attended with very great pain.

"She sent for one O'Neil, a butcher. This man came to her the Sunday after her message, and found her in an expiring condition. By this time the imposthumation had broken, and an elbow of the child had forced its way through, and appeared in view. At the request of herself and friends, he undertook to administer relief to her, and made so large an incision above and below the navel, as enabled him, by forcing his fingers under the jaw of the foetus, to extract it; on which operation he met not with the least impediment. He afterwards looked into her belly, and seeing something black, he put in his hand, and extracted by pieces, a perfect skeleton of a child, and several pieces of black petrified flesh. After the operation, he stitched her up, and in six weeks she pursued her business about the house.

"She has been in good health ever after; only she had a navel rupture, owing to the ignorance of the man in not applying a proper bandage."

A similar case to this is recorded by Dr. Gabriel King, of Armagh, in *Medical Essays*, Edinburgh, 1742.

"The wife of a farmer, near Augher, fifteen miles from Armagh, who had borne some children, believed herself again with child in 1720. During the greatest part of the nine months of her pregnancy she was very sickly, but the labour pains did not

come until her reckoning was out, at which time she had such midwives with her as the country affords, who, after endeavoring all they could, left her, and concluded she had no child to bear; the swelling of her belly diminished, and she became able to go about her ordinary business, though frequently she was sick and pained for about six years, when she again conceived. At the end of eight months, according to her reckoning, she felt extraordinary in the anterior part of her belly, and in a few days a small ulcer broke out below her navel; in some days more the elbow of a child appeared at this orifice. She brought out the whole arm with her bodkin, and got it cut off, but continued in great misery some days longer, but a footman to a gentleman in the neighborhood, and her relation, had the courage to pull out the remaining body of the child, while two other men, who went immediately after to the place and saw the child and cavity from which it was brought, assured me it was a full and complete child except the arm which had been taken away before. When I went, about three weeks after to see this poor woman, she was extremely emaciated, and the wound was almost closed. Upon probing at a little distance toward the left side from where the wound was I felt small bones under my fingers, which seemed to be contained in a bag so thin that I was persuaded that it might have been cut when the other child was extracted, and these bones been brought out at the same orifice. She showed me some decayed bones, which had evidently belonged to a human foetus, that she had passed partly by stool and partly with her urine, as she informed me, and they were daily coming away. She believed she would die, but after several visits, I found her walking out in the fields, and she has lived seven years since."

These three remarkable cases occurred in the Clogher Valley district and within a short distance of each other; a country in which the women are noted for their power of thwarting pain and their great determination.

Neosalvarsan

Review of Recent Literature

By W. W. QUINTON, M.D.
Buffalo, N. Y.

The latest product of the Erlich laboratories bears the number 914 and has been named Neosalvarsan.

According to Erlich it is formed through a condensation of formaldehyde sulphonylate of sodium ($\text{CH}_2(\text{OH})\text{O}.\text{SO}.\text{Na}.$) with Salvarsan.

He claims for this preparation: High solubility; neutral reaction; low toxicity; as effective if not more so than Salvarsan and that it does not cause reaction symptoms e. g., diarrhoea and vomiting, even in large doses.

It is a yellowish powder easily soluble in water and is much less toxic in its effect than Salvarsan. 1.5 gm. of Neosalvarsan is equivalent to 1.0 gm. of Salvarsan. In spite of this however, it is claimed that the new preparation is much more active than the old.

To make a solution of Neosalvarsan it is necessary only to pour the contents of an ampoule into freshly distilled water (5-10 cc if the solution is desired for intramuscular injection) and shake gently a few times. Vigorous shaking should be avoided as it will cause oxidation. It is entirely unnecessary to neutralize this solution. The temperature of the vehicle should be the same as that of the room. The water must be made fresh on the day of the injection. It is first filtered, then distilled and finally sterilized and cooled to the desired temperature.

If an intravenous solution is desired, Schreiber recommends that saline solutions in concentration up to 0.4% be used, as cloudiness will result if a greater concentration is employed and Neosalvarsan also seems to be more toxic in high concentrations.

The dose for the average male is 1.5 gm.; for the female, 1.2 gm. However a primary dose of 0.9 gm. for the male and 0.75 gm. for the female is recommended, which may be increased after noting the effect. Children will bear 0.15 gm. and nurslings 0.05 gm.

Schreiber outlines the following routine method for its administration:

First day, 0.9 gm.; third day, 1.2 gm.; fifth day, 1.35 gm.; seventh day, 1.5 gm.

Rytina gives four injections of 0.9 gm. at weekly intervals.

By the use of this new preparation the most rapid results are obtained with the least discomfort to the patient; the local and general disturbances incident to the injection being very slight.

Neosalvarsan is much better adapted to intramuscular use than Salvarsan. The initial pain caused by the injection may be avoided by injecting 5cc of a 1-2 per cent. solution of Novocain. Leaving the needle in situ, the Neosalvarsan may be injected a few minutes later.

The same extreme care in the selection of cases should be observed as with the use of Salvarsan and in this connection it might be as well to call attention to the fact that primary excision of the initial lesion is still considered of some importance in the treatment.

Three Years with the Army of the Potomac—A Personal Military History

BY WILLIAM WARREN POTTER, M.D., BUFFALO, N. Y., BREVET LIEUTENANT COLONEL, U. S. VOLUNTEERS; SURGEON IN CHARGE OF FIRST DIVISION FIELD HOSPITAL SECOND ARMY CORPS; SURGEON 57TH REGIMENT NEW YORK VOLUNTEERS; ASSISTANT SURGEON 49TH REGIMENT NEW YORK VOLUNTEERS; RECORDER SECOND DIVISION HOSPITAL SIXTH ARMY CORPS, ETC., ETC.

2d. Spottsylvania.

We have been almost constantly fighting for the past seven days, and are now confronting the enemy with a prospect of renewing the contest almost any moment, our lines being near Spottsylvania C. H. General Sedgwick, the Commander of the 6th Corps, was killed on the 9th near Todd's Tavern, by a sharpshooter while he was reconnoitering the enemy's position from a redoubt. I saw Colonel McMahon, of Sedgwick's staff, very soon afterwards, and he told me the General was wounded in the head and fell backwards into his (McMahon's) arms, expiring almost instantly. The 57th regiment has been sent to Fredericksburg to do provost guard duty for the present.

May 13. Friday. Still at Cossin's. Yesterday morning, May 12, at four o'clock the Second Corps, after marching all night from our position on the right, attacked the enemy near his center, and went over the works with a rush, the First Division in the lead in two columns of masses, each regiment doubled on the center, General Barlow leading the charge in his shirt sleeves. We had forty-five cannon in our possession at one time during the charge, and brought off twenty-two of them, capturing also 4,000 prisoners, including Generals Ed. Johnson and George H. Stuart, besides some colors. Our loss was heavy, and I had 1200 wounded in my hospital before noon. I have 950 in the hospital to-day, after sending 450 to Fredericksburg yesterday. Colonel F. A. Walker was injured by a fall from his horse on the 10th, and is now in my tent. General Barlow has sent the Division band to play for the wounded in hospital, which is the first music we have been allowed since crossing the Rapidan.

May 15. Sunday. I worked all night last night shipping the wounded to Fredericksburg, using 250 army wagons, all the ambulances and spring wagons of the Division, fifty in number, and besides sent a large number on foot. After all the transportation was exhausted, about 200 were still unprovided for, and these I was ordered to leave behind, as the Corps was moving to the left thus uncovering the hospital; so it must be broken up.

Nurses and rations were provided and everything possible was done for their comfort. I was the last authorized person to leave, which I did about eight o'clock A. M., and within fifteen minutes after Rosser came in with a light brigade, capturing the place, paroling the men, and taking the extra rations for his hungry horde. We are not fighting to-day, but shall probably resume business in a day or two. Lieutenant Colonel Strycker, 2d Del., was killed on the 12th, and Colonel Frank has been relieved of the command of the Third Brigade, reason not known to me. The charge of the Second Corps on the 12th is regarded as one of the most brilliant and effective of the war.

May 17. Tuesday. The 49th has suffered severely in the recent battles, ten officers being reported killed and six wounded; Colonel Bidwell is safe. I saw Dr. Hall yesterday, who gave me these particulars. I notice all the papers speak of General Grant as though he commanded the Army of the Potomac. General Meade is in immediate command and directs the movements, but, of course, under Grant's advice and guidance as to the general plan.

May 19. Yesterday morning we had a fight, losing about 500 men, Lieutenant Hall, 57th, on Colonel Frank's staff, among the number. I have had no rest for two nights past, from the fact that we have moved our hospital during both nights. The papers speak of the flying enemy, conveying the idea that they are going so fast that we can hardly overtake the routed columns. The truth is we are not ten miles from Fredericksburg yet, and the 2d Corps has not yet passed Spottsylvania C. H. We have sent all our wounded to the rear, and are under orders to move at two o'clock A. M. tomorrow, prepared for a long march. Dr. Houston is on my right writing a letter home. He keeps up good spirits and is in excellent health, enduring the fatigue well for a man of his years. General Grant's Headquarters are very near us just now, and I saw him this P. M. The enemy is strongly fortified on this line, and it is doubtful if we can drive him out, though there is a rumor today that he is falling back towards Richmond.

May 20. Our mails are very irregular and infrequent, though to-day I received home papers to the 12th. Miss Hancock is at Fredericksburg attending to the wounded of the First Division, and is reported as performing excellent service. Last night two Brigades of Ewell's corps made an attack upon our communications with Fredericksburg, but was handsomely repulsed by the new troops of Tyler's Division from the defences of Washington. Today it is very warm and a move seems on the tapis.

3d. The North Anna.

May 24. Tuesday. For the past three or four days and nights we have been almost constantly on the move. On the night of the 20th, at eleven o'clock, the corps started for the Mattaponi River, by a detour around the right flank of the enemy, and in the early morning of the 21st we passed through Bowling Green, a beautiful little village hitherto untouched by the hand of war. By ten o'clock A. M. we had reached Milford Station, and soon established ourselves about a mile over the Mattaponi, where we threw up entrenchments and awaited the enemy who came not. We held the position until the morning of the 23d, having meanwhile been joined by the rest of the army, when we set out for the North Anna, arriving at Chesterfield the same afternoon, and here we are. We are about four miles from Hanover Junction, where we heard the rebel cars whistle when we came up yesterday. We had quite a sharp fight last night, the loss chiefly occurring in Birney's Division. Skirmishing and some cannonading are going on to-day, but no general engagement. It is again rumored that the rebels are falling farther back, but I do not credit it.

Thursday, May 26. Still at the North Anna, and it is hot. The Division is across the river holding an intrenched line, while the hospital is holding a comfortable farm house on the north bank unintrenched. I sent a pail of lemonade over to General Hancock and staff, and one to General Barlow and his staff as well, to cool their parched throats this hot afternoon. Major Ellis was wounded on the 12th by a ramrod in the arm, but it is not reported as dangerous. Captain Arnold lost one of his guns at the Po River on the 10th—the first the 2d corps ever lost—through no fault of his—however. The gun became entangled in a small tree when the Division retired, and, as it could not be extracted readily, it was disabled and left to comfort the enemy. It is reported that Lee will make a big stand here—just the contrary of the rumor yesterday, as will be observed; but we shall see which is correct. The 57th is still at Fredericksburg doing provost duty, Captain Wright acting as Provost-Marshal.

The Totopotomoy.

May 30. Monday. We have crossed the Pamunkey River and are again on the Peninsula, our front line of battle being, it is stated, not more than twelve miles from Richmond. We left the North Anna on the 27th, bivouacking that night within three miles of the Pamunkey. The 28th and 29th were spent in reconnoitering and skirmishing, and today we are confronting a line of the enemy's works at the Totopotomoy.

May 31. Still at it on the Totopotomoy line. It is a very hot day, and a ration of whiskey has just been issued to the troops. About two o'clock P. M. Captain Rose, C. S. Third Brigade, came to my quarters in a greatly "demoralized" state, and soon fell fast asleep on the ground inside the tent. At night-fall we were ordered to move, and after loading the wounded into the ambulances and packing up everything, I put Rose into the leading ambulance alone, when we started for Cold Harbor. During the night a wounded man crept in alongside of Rose, and when he awoke in the gray of the morning he—Rose—thought he had been wounded also, and began a self examination with a view to determine as to the fact. He told of this himself afterwards, to the great amusement of all his friends. Colonel Brown, 145th Pa., has not been heard from or of since the 12th, and it is supposed he was captured at the assault at the salient. I saw his dog "Spot" today at the hospital, looking as though he had lost his last and only friend. I hear Captain R. B. Heacock, of the 49th, was killed at Spottsylvania on the 18th. Dr. George L Potter and I made an operation yesterday upon Lieutenant Hunt of Arnold's battery. He was struck in the foot with a piece of shell about noon, and we removed all the fractured bones, hoping to save the foot. (Lieutenant Hunt died in Washington a few days afterward, with lockjaw.)

4th Cold Water Harbor.

June 2. Thursday. Today is hot and dusty. The Second Corps is now the right of the Army, for the first time since we started out, the Sixth Corps having been moved from the right toward the left in the night. Yesterday the First Division had two hundred wounded, and all were sent away but thirty-five. Thus far today (twelve M.) there has been no fighting, only an occasional gun being heard along the lines. We heard a rumor a short time ago that the enemy was preparing to attack our right flank, and that we might be compelled, if he did, to move our hospital to keep it out of danger of probable capture. An officer from General Meade's headquarters just told me that General "Baldy" Smith had joined the Army of the Potomac on the left, with 20,000 men. Hurrah! Our depot is now at the White House, and our position is very near where we were two years ago under McClellan.

Friday, June 3. We had a severe battle this morning in which the First Division lost heavily. I cannot say how many now, but I have already received over five hundred in hospital, and the wounded are being brought in constantly. We are but a short distance from Cold Harbor, yet it seems very difficult to

get quite there. The Nemesis of the Army of the Potomac appears to be enshrined in that region. Colonel J. C. Drake, 112th New York, formerly Captain in the 49th, was killed day before yesterday. I saw Dr. Hail this morning, and he is well. Colonel Morris, 66th New York, Colonel Peter A. Porter, 8 New York Artillery, and Colonel McKeon, 81st Pennsylvania, were killed this morning, all commanding Brigades. Their bodies were brought to my hospital, whence they were sent north. The 57th had not returned from Fredericksburg yet, though I presume it will join us soon. I have shipped 423 wounded to the White House today.

June 4. Sent another consignment of wounded to the White House today, numbering 255, and shall probably send more tomorrow. General Grant's Headquarters are within a quarter of a mile of my hospital, and I see him quite often. No fighting today excepting skirmishing, and an occasional gun. The 57th has returned; Captain Wright and other officers are looking well, but they will be obliged to take part in the heavy fighting now, and I fear the result to the remnant of that once splendid regiment. Dr. Gesner is also back again, but he is given to complaining so much that he is no longer an interesting companion. S. B. Butler ("Brain") called on me yesterday and, as he was not feeling well, I gave him a little *Sp. Frumenti*, which seemed too brace him up.

Monday, June 6. I sent away 357 more wounded yesterday, making 1035 in the last three days. Today we moved the hospital about two miles towards the left, and are now at the Tyler House, on the road leading from Cold Harbor to the White House. This estate was formerly owned by Dr. Tyler, a cousin of Ex-president Tyler, who died while we were in this vicinity two years ago. We are about two miles from Dr. Gaines' farm, where we camped in May, 1862, and where Porter fought his great battle on the 27th of June, 1862. We are not fighting very heavily these days, but receive about one hundred wounded daily into my hospital. We occupy the house for office and mess purposes, and our tents are pitched on the lawn in front. Colonel Brooke commanding the Fourth Brigade was wounded two days ago, and Colonel Beaver now commands that Brigade. Information has been received that Colonel Brown is in Richmond and unhurt. It is thundering heavily, and a rainstorm is imminent. The 57th is in the front line of breastworks, doing duty at the post of danger in its accustomed good way. Captain McCuen, Provost-Marshal at Corps Headquarters, had one of his legs shot off last evening in front of General Hancock's tent. Hancock is considered by all as the high hand corps commander

of this Army, one who is always where he is wanted at the critical moment, and who punishes the enemy severely when he goes monkeying around the Second Corps. In many respects he is an ideal field commander, and it would be difficult to supply his place, should anything happen to render this necessary.

June 8. Still at the Tyler House. Mrs. General Barlow and Miss Hancock arrived yesterday morning, and are my guests, Miss Hancock busying herself in caring for the wounded. We have a large ice house on the premises filled with native ice, which is a great comfort to the wounded—and the unwounded. General Barlow has just been here to see his wife, and found her supplying the wounded with milk punch, while we are loading them for shipment to White House.

June 9. Thursday. I have just had orders to send all my wounded to the rear at White House, which looks like a move to-night. Dr. John S. Billings, Assistant Surgeon U. S. A., Medical Inspector A. of P., visits the hospital every day, spending some time in unofficial intercourse with us, as he finds it a convenient place for obtaining a little rest when he needs it. He has been a frequent guest at odd times during the campaign, and seems to enjoy himself here very much. We always try to make him feel at home, and quite welcome whether for duty or otherwise. Mrs. Barlow and Miss Hancock are with us yet, and may remain for some time. Captain Arnold's time has expired, so he has been mustered out, and he went home day before yesterday. I met Captain Elliot on the 7th; he was well and appeared in good spirits. I should not be surprised if we turned up on the James River next.

Saturday, June 11. The news of the sudden death of James Prince at the Mansion House in Buffalo, has just reached me. It was a great shock, as he always appeared the picture of perfect health. Thurlow Weed was at the hospital today, and expressed himself as greatly pleased with the care we give the wounded in our field hospitals, and particularly this one. I am sending away my wounded again today, and Mrs. Barlow and Miss Hancock will return to the White House with this lot. From present appearances I think we shall move tonight.

Sunday, June 12. This is one of the most delightful days we have had since the campaign opened—an ideal summer day in every respect. Religious services were held on the lawn in front of the house this morning, the First Division Band furnishing the music, playing, among other airs, the Doxology at the close. It was an impressive and interesting scene to see the soldiers that could get out of the tents gather around, and enter

into the spirit of the service, as much as though it were in the finest church. Dr. Aiken expects to start home tomorrow, as his regiment's time expired today. I am sending away more wounded today, and Dr. Dougherty informs me that we shall positively move from here tonight. I suppose there is great anxiety at the North just now as to our operations; but patience, patience. We have more men than McClellan had on the Peninsula, and the rebels are weaker; yet we need re-inforcements, and Grant will have them. Neither Stanton nor Halleck can prevent it this time. Stanton's principal occupation seems to be, just now, to telegraph bulletins to General Dix at Fort Monroe.

5th Petersburg.

June 18. Saturday. We have crossed the Chickahominy and James Rivers, and are now fighting a great battle before Petersburg. I have already 850 in my hospital, and the cannonading is terrific. The 57th is nearly wiped out, all the officers but two being wounded—some of them mortally. Captain Wright is wounded in the foot; (afterwards amputated and died; Captain Alcock in the chest; (he lost an arm at Fredericksburg); Major Kirke, mortally; Captain Middleton, slightly; Adjutant Case, flesh wound in the neck; Lieutenant Brower and Britton both have flesh wounds and will recover. The regiment had but forty-five men for duty yesterday. This is the third day of the battle, and the end is not yet. Mrs. General Barlow is here, with some members of the Sanitary Commission, dispensing luxuries to the wounded. Colonel Beaver is slightly wounded in the side, and will go home to recover. The little drummer boy of the 61st, George Nims, has received a most frightful wound, his face having been nearly torn off by a shell last night.

We left the Tyler House at dark Sunday night, marched all night the 12th, all day the 13th, resting at night; marched all day the 14th and 15th until daylight the 16th, when we reached the James River. The troops had already crossed the day before, but as I did not feel well I remained with the main hospital and ambulance train, crossing the James with it about three o'clock P. M. of the 16th, on a pontoon bridge between Wilcox Landing and Windmill Point. We pushed on for Petersburg, distant sixteen or seventeen miles, where the troops were already engaged, reaching there about ten o'clock P. M., when we immediately set about putting up the hospital and gathering in the wounded, working all night at this business.

(To Be Continued.)

Organotherapy

By EDWARD T. SMITH, M.D.
Buffalo, N. Y.

ORGANIC chemistry in the past ten or fifteen years has given to the medical profession some of its greatest remedies to combat disease and deserves more attention from the general practitioner.

What would medical history in that time have been but for the experiments and discoveries of Pasteur, Roux, Behring, Flexner and a host of others not so well known? It would be only a continuance of the old methods with different forms of drugs and combinations which medical science has been carrying on from the beginning of time and with the same uncertain and unsatisfactory results. Organic chemistry has robbed diphtheria of its terrors with antitoxin. Hydrophobia is successfully combated with the Pasteur serum. Adrenalin has proved its great superiority over all drugs in controlling certain forms of haemorrhage and saving life and Flexner has discovered a serum that robs the dreaded cerebro-spinal meningitis of its victim. The elaboration by Wright of bacterins has revolutionized the treatment of many diseases.

I do not include in the list of these newer remedies certain advertised combinations of animal extracts with iron, nux vomica, etc., nor the so-called "goat lymphs," lymphines and combinations of that character which are neither scientific nor useful.

It is unfortunate that in the past organic medicine was a wide field for quackery and the occult, but this day has gone by. In the light of modern science it is the mainstay of medicine and the hope of the human race in great epidemics; and the names of Brown-Sequard and Hammond (whose student I had the honor to be) will stand out prominently as among the great benefactors of mankind.

Extravagant claims have been made by certain manufacturers of animal extracts from the pancreas, spleen, ovaries, mammæ, kidneys and liver. I have used all their makes, and even those made in my own laboratory, under my own personal supervision, and I consider them inert, with one exception: the corpus luteum. This portion of the generative organs has demonstrated its value in women suffering from the many disagreeable symptoms of the change of life, controlling the hot flashes, palpitation of the heart, and all disagreeable symptoms of that period. It is the only remedy that has any value in this critical period of a woman's existence, and we owe it to organic chemistry.

I regard dessicated testes and cerebrum as inert, but I cannot say that in regard to the hypodermatic use of testes. A properly

made orchitic extract prepared with glycerine and diluted with normal salt solution has very decided tonic properties in all degenerative diseases and the lymphatics prepared in the same manner give equally good results. A word of caution is here given never to apply any commercial animal extract to an abraded surface. If you will only moisten a small portion with sterile water and look at it through a $\frac{1}{4}$ inch objective you will get an object lesson in bacterial life.

It is not safe to inject an albuminous extract of the brain for several reasons. One reason is on account of the impossibility of making a perfectly sterile extract, and another is the danger from the neurin in the substance of the brain; any reaction that has ever been noticed from the injection of so-called brain extracts has, in my opinion, been due to the action of neurin upon the central nervous system. The brain of the sheep contains practically no neurin, and only in exceptional cases a very small portion of cholin, and should be used to make the extract for hypodermatic injection.

I can frankly say I never have been able to make an albuminous extract that I would inject. Poehl has prepared an extract of the brain for hypodermatic use which he calls opocerebrin, but for therapeutic results I class it with his preparation which he called spermin—an inert substance sold at a very high price.

There is no one alkaloid of any organ that will take the place of the organ itself; neither adrenalin, spermin, opocerebrin, nor others.

We now come to the one great draw-back of organotherapy and that is the hypodermatic needle. Patients dread the needle and as in some cases repeated injections are called for they refuse to continue treatment. I have given a great many thousands of hypodermatic injections and have no trouble and the reason is I always use a sharp needle, pinch up the flesh instead of spreading it as is usually advised, and never inject when I feel any obstruction. Never use force in injecting as it is better to withdraw and re-insert. It is not the injected matter that hurts but forcing a dull needle or one of too large calibre through the sensitive skin. In extra-sensitive persons you can spray the part with ethyl chloride. Use a sub-Q syringe and do not economize on needles as they are cheap and your glass syringe will prevent injecting air. By always injecting deeply into the connective tissue—never in the muscular—and using slight massage with alcohol afterwards, I have never had an abscess and only a very few nodosities which disappeared in a few days. After the first injection I have no trouble in inducing patients to continue treatment.

For the past few years I have been using empirically as a tonic and reconstructive in all degenerations and chronic infectious diseases, an extract made from bull's testes, mesenteric lymph glands and sheep's brain; forty per cent. each of brains and testes and twenty per cent. lymph glands, made by boiling the above in absolute alcohol, extracting the remaining proteids by succussion and evaporating the residue on a water bath. The result is a slightly brown crystalline mass; containing spermine from the testes, the two brain spermines, a lecithin from the lymph glands; and other extractives, the composition of which I do not know; the whole possessing all the tonic and special properties of the several organs. If a trituration of this extract is made with sugar of milk, and one minim of guaiacol added to each 2000 grains of mass it will not deteriorate for a long time. This small proportion of guaiacol must be added as some of those extractives are abumenoids and the mass will become mouldy in a short time if it is omitted. It can also be made in solution with 20 per cent. alcohol which will prevent change. Dixon first demonstrated that the nucleo-proteids and organic salts in the testes and brain were unaltered by boiling.

For hypodermatic use the extracted phosphorized fats can be used as a vehicle and it is advisable to put up each injection in a sealed ampoule if not used at once. I do not claim any particular virtue from the phosphorized fats but they make an ideal vehicle. If a preservative is used I prefer chloride of gold one to 5000 to trikresol.

The dosage is a very important matter and I generally give $\frac{1}{2}$ grain of the extract triturated with sugar of milk three times daily, or the same amount in solution. The triturate tablet is very convenient. If used hypodermatically one ampoule daily will answer nearly all purposes, except in very serious cases. The effects of any overdosage are a sense of exhilaration and a rapid pulse. The pulse soon subsides but the stimulation of the senses persists for a long time and is followed by profuse diuresis. There is no actual danger from an overdose, but over stimulation should always be avoided.

I have used this form of extract for the past few years for internal administration in locomotor ataxia, nephritis, tuberculosis, asthma, hay fever and all degenerations and chronic infections, with the most satisfactory results, it being superior to any form of treatment laid down in the text books for these diseases.

I speak not only from my own experience but from that of many other physicians in all parts of the United States who have been supplied from my laboratory. It has been demonstrated that this combined organic extract is the nearest approach to a

specific cure in asthma and hay fever that is before the medical profession at the present day.

It makes no difference how long standing the case may be or how complicated with other diseased conditions, the systemic tonication of this remedy acts better than any treatment laid down in the text books. Even in the great scourge of the human race, tuberculosis, it has proved its great superiority over all other remedies and I use it now to the exclusion of everything else. It is wonderful how it improves nutrition and innervation, and it never disagrees with the patient. All nauseous mixtures, oils, emulsions and cough mixtures are unnecessary with this extract and must be forbidden. The only restriction in diet is avoidance of too much starchy food, and excessive crowding of nourishment in tuberculosis. I cannot see the reasoning that makes physicians crowd in several times what a healthy stomach could digest, and if the digestive tract was in a healthy condition it would be unnecessary.

The first effect upon the digestive tract on giving the extract, is its local tonic action, and, secondly, an almost selective action upon the desquamative necrosis of the mucus membrane of the stomach and intestines. In incipient cases of tuberculosis the so-called pre-dyspepsia soon disappears, and in advanced cases the fermentation, distress and gas formation are soon controlled. In advanced cases with sweats, chills and fever, as soon as the stomach is in a healthy condition and digests food, and the restorative action of the digested food and the stimulant action of the extract begin to show their effects, these symptoms begin to abate. At the same time the distressing, hard cough from irritation of the vagus is ameliorated. The relief is remarkable; and no opiates are needed, which is providential, as they nullify any good action from the remedy.

The patient soon begins to gain in weight and strength and as these results are quick to show themselves you at once gain his confidence. All artificial emulsions of fats, tonics, containing iron, etc., are prohibited. There is no necessity for any other medication and none must be used.

It is always advisable to use the extract hypodermatically in conjunction with the internal administration of the extract, daily if possible, and, if not, as frequently as possible. By doing this you obtain better results than from using either alone and this is advised in serious and long standing cases. When the patient is very much emaciated it is always best to inject in the buttocks. In cases of long standing tuberculosis with extensive fibrous conditions no remedy can cure and the best that can be expected is

relief and this can be more quickly obtained by this extract than by any other means.

I very strongly advise its use in all obscure cases of every character where there seems to be a want of tone or action in any special organ or organs in either sex. In premature senility it is particularly efficacious, clearing up the skin, removing wrinkled countenances and restoring elasticity to the skin. I use it in nervous diseases particularly in impotence for its beneficial action upon the spinal centers, injecting it supra-durally. Any physician with only a limited laboratory experience who can obtain the materials can make this extract and its mode of preparation by heat removes all danger of contamination. He will be repaid by the satisfactory results in treating many obstinate and obscure conditions which do not respond to the treatment laid down in the text books.

SOCIETY PROCEEDINGS

THE 14TH ANNUAL MEETING of the *American Hospital Association*, philanthropy, nursing, etc., will be discussed. Dr. to Friday, Sept. 24—27, 1912. Various phases of business management, philanthropy, nursing, etc., will be discussed. Dr. R. R. Ross of the Buffalo General Hospital will read on the Use of Salvarsan. The Secretary is J. N. E. Brown, M. B., 90 Charles St., East, Toronto, Ont.

The 13th Annual Meeting of the Lake Keuka Medical and Surgical Association was held at Grove Springs, Lake Keuka, N. Y., July 11th and 12th, 1912.

Program:

Ectopic Gestation with a Case, J. F. Myers, Sodus.

Flatulence, John R. Williams, Rochester.

Diagnosis and Treatment of Perforated Duodinal Ulcer, Nathan Jacobson, Syracuse.

A Few Suggestions Regarding the Cure of Hernia, W. B. DeGarmo, New York City.

The Relation of Migraine to Autointoxication, Albert C. Snell, Rochester.

Crotalin in the Treatment of Epilepsy and Nerve Disorders, James B. Woodruff, Rochester.

Operations for Diseases of the Gall Bladder, A. L. Beahan, Canandaigua.

Salvarsan Versus Mercury, E. Wood Ruggles, Rochester.

Syphilis of the Nervous System with Especial Reference to the Use of Salvarsan, Floyd Crego, Buffalo.

Some Observations on New Methods of Diagnosis of Syphilis, Tom A. Groat, Syracuse.

Diagnosis in Brain Injuries, Herbert A. Smith, Buffalo.

Surgical Procedures in Brain Injuries, Frank W. McGuire, Buffalo.

The Advantages of the Laboratory to the Country Physician, E. C. Foster, Penn Yan.

Epidemic Pneumonia, L. C. Lewis, Belmont.

Clinical Teaching in the Fifth College year, John L. Heffron, Syracuse.

Typhoid Vaccine as a Prophylactic and Therapeutic Measure, A. E. Larkin, Syracuse.

The fourteenth annual meeting of the American Proctologic Association was held at Atlantic City, N. J., June 3 and 4, 1912, the president, Dr. John L. Jelks, of Memphis, Tenn., in the chair.

Officers elected for the ensuing year: President, Louis J. Hirschman, M. D., Detroit, Mich.; Vice-President, Alois B. Graham, M. D., Indianapolis, Ind.; Secretary-Treasurer, Lewis H. Adler, Jr., M. D., Philadelphia, Pa. The place of meeting for 1913 will be at Minneapolis, Minn. Exact date and headquarters to be announced later.

The September issue of the *Proctologist* (St. Louis) will contain a full report of papers and discussions.

The fourth annual meeting of the American Association of Clinical Research will be held in New York City, at the Academy of Medicine, on November 9, 1912.

The sessions will be held from 9 a. m. to 1 p. m., from 3. p. m. to 6 p. m. and from 8 to 10 p. m. The evening session will be open to the public.

Notable contributions on the Negri Bodies, on certain Fluids for Tubercle Bacilli in the Urine, on Adjustment and Function, on Psychoanalysis and Traumbedeutung, on a Pandemic of Malignant Encapsulated Throat Coccus, on The Single Remedy on Indicanuria and Glycosuria, on Disease Conditions expressive of Correct Diagnosis, on Biochemic Problems, on The Two Most Far-Reaching Discoveries in Medicine, and others are to be given.

The permanent secretary, Dr. James Krauss of Boston, urges that local branches be formed in various large cities.

ABSTRACTS

Les Crises Abdominales des Goutteux et des Oxalemiques

By PROF. M. LœPER, Paris
Progres Medicale, October 28th, 1911

The gastro-intestinal symptoms of gouty individuals have been very much discussed. Prof. Lœper divides them into two classes: acute and sub-acute attacks, affecting either the stomach or the intestine, or both together at the same time. Acute attacks may consist of: gouty gastritis, with painful distension of the stomach; acute dilatation, with vomiting, cold sweat, and a tendency to syncope; spasmodic colics, painful diarrhœa, neuralgia, rather suggestive of those of lead poisoning, tabes or abdominal arteriosclerosis. Sub-acute attacks consist of symptoms of sensitivo-motor dyspepsia, pain, alternating constipation and diarrhœa, spasmodic intestinal pains, atony of the alimentary canal, and even repeated evacuations of mucus.

These attacks seldom affect the stomach, and Prof. Lœper has only seen it once. But the intestinal form is more frequent and Prof. Lœper records a very typical case of what he terms "crise entéralgique diarrhéique," and another of "spasmodique or mucorrhéique" attack. Besides these acute forms there are minor forms resembling gastro-intestinal dyspepsia, the diagnosis of which is always confirmed by a consecutive attack of gout.

Prof. Lœper holds that these attacks are due to the action of the gouty toxins, and namely of oxalic acid, on the solar plexus: regulates gastro-intestinal secretions, and the rhythm of the movements of the alimentary canal, and its irritation causes pain, either with diarrhœa, spasms or paralysis. Therefore the abdominal attacks of gouty individuals are, or at least may be considered as attacks of toxic cœlialgia.

Nov. 4th, 1911.

Traitement du coma diabétique, by Dr. Blum, Privat-docent, Strasbourg. An effective treatment of diabetic coma must realize three essential conditions: 1° neutralise the acids and promote their elimination; 2° help to the re-mineralisation of the system and to establish the proper balance of the mineral constituents of the blood; 3° prevent the vaso-motor weakness which is common to all forms of coma.

The food must contain neither albumen nor fat: 1 or 2 pints of milk may be taken as well as 4 or 5 oz. of glucose per diem: champagne or brandy *larga manu*; sodium bicarbonate, 1 or 2 drachms, every 2 hours, until the urine becomes alkaline: vaso-motor and cardiac stimulants (Ringer's solution with a little adrenalin.)

Nov. 11th, 1911.

Sur le mécanisme de l'action des principaux agents diurétiques, by Prof. A. Mayor, Geneva.

An efficient diuresis must realize two conditions: it must promote the evacuation of fluids and the evacuation of poisons. Two classes of diuretics must therefore be considered, and Prof. Mayor strongly objects to the common tendency of some physicians who consider only one kind of diuretics, the "vascular diuretics."

As to the elimination of fluids, Prof. Mayor divides œdemata into two main classes: according to whether their origin is mechanical or osmotic. The first ones must be treated by digitalis, strophanthus, squill, potassium salts or chloride of calcium. The second form of œdema (osmotic) must be treated by xanthic diuretics, like caffeine, theobromin or theophyllin, which have the great advantage of preventing further resorption of sodium chloride; if the kidneys are too irritable, urea or lactose may be prescribed.

As to the elimination of poisons, proper diet, large doses of water, either plain water or mineral waters like Evian or Vittel, serum injections, large enemata, massage and baths are the most effective means.

Nov. 18th, 1911.

La goutte et son traitement par l'émanation du radium, by Prof. W. His, Berlin. After discussing the various meanings of the word "gout," Prof. His holds that this term must be restricted to a morbid entity characterised by disorders in the metabolism of nucleinic substances and by the presence in the blood of uric acid, this uric acid being independent of the patient's diet. In doubtful cases the diagnosis must be confirmed by an analysis of the patient's blood.

Inhalations of radium emanations, and namely of alpha and beta rays, have given Prof. His excellent results which he has always confirmed by a careful examination of blood and urine. Out of 49 patients 37 have lost all their uric acid in average of 25 éances; 9 had no result and the 3 last ones had regained perfect health, although they had not lost their uric acid. The 37 successful cures seem to be definitive, uric acid having not reappeared in the blood after several months and even in one of them after a year and a half.

This extremely interesting article is full of practical points about the various apparatus required, and Prof. His' keen clinical sense will be greatly appreciated by the readers.

A. E. E. REBOUL, M. D.,

"Médecin aux eaux de Chatel-Guyon." L. R. C. P. & S., Edin., etc.,
Fellow of the Royal Society of Medicine.

Technique of Brain Surgery

By ROBERT EARL, M.D.

St. Paul

From *The St. Paul Medical Journal*, November, 1911

Nothing new is offered in this paper but the author calls attention to the numerous little details to be observed in intra-cranial surgery.

He describes the Cushing extension attachment for operating tables to facilitate operation on the cerebellum. The large osteoplastic flap is best made with the burrs and forceps devised by Dr. Hudson, of Atlanta.

The author calls particular attention to the dangers of rapid operating and rough handling of brain tissue, and insists on careful hemostasis and gentle handling.

Sub-temporal decompression, as proposed by Cushing, is advised for fractures of the base with symptoms of increasing intra-cranial pressure.

E. A. S.

A Study of the Miliary Plaques Found in Brains of the Aged

By SOLOMON C. FULLER, M.D.

(From the Pathological Laboratory, Westborough State Hospital, Mass.)

From the *American Journal of Insanity*, October, 1911

Miliary plaques, similar to the findings reported by Redlich in 1898, and by Blocq and Marinesco in 1892, were found by Fuller in the brains of 16 cases out of 33 elderly subjects dying insane, and in 1 case out of 6 brains from elderly subjects without psychoses. As a control he examined the material from 50 younger subjects dying of various mental diseases, but without finding the plaques.

The general morphology of the plaques is best studied by the Bielchowskys silver impregnation method. The plaques are described as discreet structures of variable size in which a dark, circular, homogeneous, nuclear-like mass is centrally disposed. Surrounding the dark, homogeneous portion is an area of variable extent, always larger and lighter than the nuclear portion and larger than the adjacent brain tissue. The diameter of the plaques may be 4 to 6 times that of a ganglion cell.

When the plaques are present they are usually widely distributed throughout the cerebrum, but with a preponderance in the frontal lobes and hippocampal regions.

Fuller believes the plaques are the deposited products of pathological metabolism resulting from degenerating nervous elements (fibrils). The views which other writers hold regarding these plaques are also discussed. Fischer considers them characteris-

tic of presbyophsenia while Huebner denies they are characteristic of any special psychosis, merely indicating that the patient has reached the 5th decade. Fuller concludes that they cannot be considered as characteristic for any special form of mental disease, autho occurring with greater frequency in senile dementia than in any other form of insanity.

The article is illustrated with 17 photomicrographic plates, and there is an extensive list of references attached.

E. A. S.

A Study of Heredity Insanity in the Light of the Mendelian Theory

By A. J. ROSANOFF, M.D., and FLORENCE I. ORR, B.S.

Kings Park State Hospital, Kings Park, N. Y.

From *American Journal of Insanity*, October, 1911

The authors have taken up the present study with a view to determine whether a neuropathic constitution is transmitted, in cases of insanity, in the manner of a Mendelian trait, and they state briefly the Mendelian theory as follows:

"The total inheritance of an individual is divisible into unit characters, each of which is, as a general rule, inherited independently of all other characters and may therefore be studied without reference to them. The inheritance of any such character is believed to be dependent upon the presence in the germ plasm of a unit of substance called a *determiner*."

A character may be dominant or recessive and these characters are represented in the formulae by the symbols D and R respectively.

The pedigrees of 72 families have been arranged in a table showing the types of matings, and the actual findings compared to that which would be theoretically expected, and the findings are surprisingly similar. Thus, out of a total of 206 matings of all types in these 72 families there were 1097 offspring. The neuropathic offspring showed an actual finding of 351 as against the theoretical expectation of 359, and the normal offspring gave 586 as against a theoretical expectation of 578, and they regard this as definitely establishing the fact that the neuropathic constitution is transmitted as a recessive trait, in accordance with the Mendelian theory.

Various neuropathic equivalents are found in the ancestry of the insane as well as in the families of epileptics. In the families of patients suffering from manic-depressive insanity they find not only subjects clearly recognized as insane, but also others described as high-strung, excitable, abnormally selfish, awful temper, periodic drinker, severe blue spells, etc. In the pedigrees

of dementia præcox they find relatives described as cranky, stubborn, queer, has phobias, suspicious of friends and relatives, etc.

The neuropathic equivalents of epilepsy include hemicrania, recurrent sick headaches, fainting spells, nervous figety make-up, etc.

All these conditions are graphically shown in the 73 pedigree charts which accompany the article.

The following conclusions are drawn:—

1. The neuropathic constitution is transmitted from generation to generation in the manner of a trait which is, in the Mendelian sense, recessive to the normal condition. Rules of theoretical expectation are accordingly as follows:

a. Both parents being neuropathic, all children will be neuropathic.

b. One parent being normal, but with neuropathic taint from one grandparent, and the other parent being neuropathic, half the children will be neuropathic and half will be normal but capable of transmitting the neuropathic make-up to their progeny.

c. One parent being normal and of pure normal ancestry and the other parent being neuropathic, all the children will be normal but capable of transmitting the neuropathic make-up to their progeny.

d. Both parents being normal, but each with the neuropathic taint from one grandparent, one-fourth the children will be normal and not capable of transmitting the neuropathic make-up to their progeny, one-half will be normal but capable of transmitting the neuropathic make-up, and the remaining one-fourth will be neuropathic.

e. Both parents being normal, one of pure normal ancestry and the other with the neuropathic taint from one grandparent, all the children will be normal, half of them will be capable, and half not capable of transmitting the neuropathic make-up to their progeny.

f. Both parents being normal and of pure normal ancestry, all the children will be normal and not capable of transmitting the neuropathic make-up to their progeny.

E. A. S.

SOURCES OF TUBERCULOUS INFECTION.—Knopf, (*N. Y. Med. Jour.* June 29, 1912.) estimates that of the 150,000 who die annually from tuberculosis in the United States, 50,000 are bread winners. If a value of only \$1500 is set on each life the loss to the community reaches \$75,000,000. Another third probably are school children. Making the average duration of life only 7.5 years and figuring the cost to the parents of each child as only \$200 per annum, the community loses another \$75,000,000.

Children who live in close association with tuberculous parents are found to be tuberculous in 51% of the cases.

Biggs, Brouandel, Naegeli and many others assert that the vast majority of city people living in cramped quarters have or have had tuberculosis. Knopf believes that at least 25% of the children of the masses have an undiscovered tuberculosis. In large families it is nearly always the later born who contract the disease. The age of the father, physical condition of the mother and poverty are all factors.

Direct bacillary transmission through the placenta is rare but occurs perhaps more frequently than our statistics would seem to indicate. However postnatal infection is the most frequent cause. Alcoholism is a strong predisposing cause. There is no doubt that the infection is not infrequently transmitted by the mother's milk. While the bovine type may be considered a negligible factor in pulmonary tuberculosis of the adult, in children it is responsible for a large percentage of cervical, alimentary and bone and joint infections. The next most frequent primary sources of infection in childhood arise from the bacilliferous saliva and sputum of the tuberculous individual in close and prolonged contact with the child.

Among the rarer modes of infection in the adult are mentioned: The tuberculous cigar maker, glass blower, waiter, maid, bookkeeper, kissing of relics among Roman Catholics, inoculation by tattooing and circumcision. Poncet of Paris asserts that he has found the bacillus in the perspiration of consumptives.

As one method of combating the disease Knopf recommends vasectomy in tuberculous cases who insist upon marrying.

W. W. Q.

Boehm in *The Therapeutic Gazette* (Jan 15, 1912.) In acute systemic gonorrhœa I firmly believe that all cases should receive the combined vaccine treatment, but in simple acute urethral gonorrhœa either the plain gonococcus or combined vaccine in many cases is harmful instead of beneficial, because the circulation is already overloaded with toxic products and vaccine treatment may act to the detriment of the patient.

Lydston; *Medical Review of Reviews*, (Jan. 1912) Offers the following objections to the reporting of venereal diseases.

1. The venereal diseases are easily concealed.
2. The impulse to conceal them on the part of the victims is practically impossible to control.
3. Opportunity would be offered to the political and official blackmailer, whose pickings are already fat enough.

4. Under the present social conditions the victim of venereal disease would be the butt of ridicule, practically ostracised socially and treated very much as a leper might be.

5. On account of this attitude of society toward the venereal diseases those who would suffer most severely from social suspicion, repugnance or ostracism would be those who have innocently contracted the disease.

6. Physicians in general would be likely to break the laws by concealing their patients ailments. It is my opinion that most high-minded physicians would go to jail rather than betray the confidences of their patients. The physician who would expose the ills of an innocent woman, or young girl especially, to public scorn and aversion, would be unworthy of his calling. Once the reporting began however, no discrimination could justly be made by the authorities: innocently and viciously infected alike would be subject to report.

7. Patients would often go to quacks, resort to patent medicines, or do without treatment altogether, rather than consult a reputable physician who might conform to the law and report the case.

TRICHINOSIS, Dr. Geo. H. Runckel, McCloud, Calif., *Calif. state Jour. of Med.*, July, 1912. 58 cases due to eating salame sausage. 1 death. Eosinophilia 10—40%, usual symptoms, numerous active free larvae demonstrated in gastrocnemius of two patients, no adult trichinae found in faeces, sausages demonstrated to be badly infected. Treatment: castor oil, followed by glycerine, 15 cc. every hour; acetozone; quinine; Post-febrile treatment: iron, quinine and strychnine, bismuth, morphine and diarrhoea mixtures p. r. n. Another case of trichinosis in a pregnant woman, apparently cured, had what seemed to be a recurrence following delivery.

PARASITIC AMOEBAE OF MAN.—Craig (*New Orleans Medical and Surgical Journal*, July, 1912) states that at least two amebae parasitic in man are capable of producing dysentery—the *Entameba tetragena* and the *Entameba histolytica*—and one species—the *Entameba coli*—commonly observed in both healthy and diseased individuals, is a harmless commensal of the human intestine.

Any physician who has had proper laboratory training should be able to differentiate these species after the careful study of a few cases.

The *E. coli* forms cysts containing 8 daughter nuclei—sometimes more; *E. tetragena* cysts contain 4 daughter nuclei; while

the *E. histolytica* forms minute spores which are budded from the parent organism.

When it is considered that from 30-50% of healthy individuals in the tropics and subtropics show the harmless *E. coli* in the feces, the importance of recognizing the parasite before making a diagnosis of amebic dysentery is apparent.

A CASE OF OPTIC ATROPHY from '606'.—McNeil, Robb and Moll, (*Transvaal Med. Jour.*, May, 1912) report the case of a man 31 years old who had sores on the penis and glandular enlargements. Eighteen days after .6 gm. of Salvarsan were injected intramuscularly. Within a fortnight the sores had healed and he was placed on Hydr. cum Creta, 1-2 grain T. I. D. One month after he became blind in one eye and the diagnosis of optic neuritis was confirmed by an ophthalmologist. No atrophy could be discovered in the other eye. They ascribe the atrophy to the effect of the Salvarsan.

(The case is instructive. The condition of the fundus oculi prior to the injection is not given so it may be assumed that it was not examined. More than 60,000 cases, we are informed, have received the drug without an authentic case of amaurosis. That it will hasten blindness when a spinal optic atrophy already exists seems certain; mercury will do the same. Mild degrees of optic neuritis are common in syphilis and it is certainly unfair to charge a bad result to Salvarsan when it may well have developed as a result of the infective process.

In syphilitic iritis, neuroretinitis, choked disc, iritis papulosa, parenchymatous keratitis and chorioretinitis the effects of the drug have been found excellent and without untoward results. Ed.)

ALOPECIA AREATA.—Its Causative Factors and Therapy.—Bechet, (*New York Med. Jour.*, June 29, 1912) believes that the disease presents two distinct varieties, the contagious and the trophoneurotic.

Errors of refraction, sudden nervous shock from fright, grief, accidents, etc., may be responsible. Stelwagon reports a case covering almost the entire scalp resulting from a blow on the head.

In France a number of epidemics have occurred and French observers consider the disease practically only from its contagious aspect.

Sabouraud considers the disease contagious and has found a microbacillus in the upper dilated portion of the diseased

follicle which he calls, le microbacille de l'utricule peladique. It is impossible to distinguish it from the acne comedo and seborrheic bacillus of Hodara by any physical or biologic means.

Bechet believes in both local and general treatment. Locally he applies resorcin in 2.5—6% solutions with cantharides and capsicum twice daily with a circular motion. Pure carbolic acid applied with a small swab and vigorously rubbed over a small area at a time is useful. The same spot not to be touched again until two weeks have elapsed.

TOPICS OF PUBLIC INTEREST

Suicide Statistics

The following statistics are furnished by courtesy of the Bureau of the Census:

Registration area: calendar year 1910.

Month	No. of Suicides.	Month	No. of Suicides.
Total	8,590	July	777
January	641	August	714
February	581	September	706
March	856	October	710
April	713	November	684
May	757	December	648
June	803		

Death rate per 100,000 population, 16.0.

The average number of suicides per month is about 716, the maximum, about 20% above the average occurring in March; the minimum about 20% below the average, in February. It is easy to see why the maximum should occur in March, when the weather is most trying and there has been an opportunity to feel the cumulative effects of financial strain, sickness and indoor work. The sudden drop in April may be accounted for by the removal of those contemplating suicide, by the actual performance of the deed in March. Allowing for this factor, there is a fairly regular decline, with no more fluctuations than might be expected from accidental reasons, throughout the year to February. One would naturally expect the minimum to occur during the summer when the weather, lessened financial burden, diminution of sickness and opportunities for recreation all tend to make life more tolerable. On the contrary, there is a decided rise for June and the summer months generally keep near the average. Possibly the slackening of business for the summer and

consequent loss of work accounts for the June rise. It may be, too, that the greater opportunity to be by one's self in the country, and particularly beside the water, off-sets the favorable tendencies of the summer. The fall of the rate during the autumn and winter, is very likely due to revival of business.

Almost exactly 1% of all deaths occur from suicide. Excluding deaths in childhood, in which suicide is rare thought not so rare as formerly, and allowing for what are practically inevitable deaths by infection, etc., it is a safe estimate that one life in 20 or 25 is cut short by suicide. Everyone who contributes to making his fellow man's life more prosperous, happier and richer, is saving life. Everyone who is adding a cent a pound to the cost of sugar, meat, bread or any other commonly used food stuff, everyone who treats his fellow harshly and coldly, is taking life. Once in a great while, we note a case of suicide in which the individual is so useless—perhaps through no fault of his own—so depraved, so much in the way of others, that, humanly speaking, his death is a gain to humanity. In the great majority of instances, usefulness, happiness, self-respect, may be regained if the would-be suicide can be tided over a period of depression. And it is surprising what a small circumstance—a trivial courtesy by a stranger, an interesting story, a kitten's antics, any little relief from introspection—can save a life in a critical period.

THE National Association for the Study and Prevention of Tuberculosis announces that nearly 4,000 additional hospital beds for consumptives in 29 states were provided during the year ending June 1st.

In the last five years, the hospital provision for consumptives has increased from 14,428 in 1907 to over 30,000 in 1912, or over 100 per cent. New York state leads in the number of beds, having 8,350 on June 1st; Massachusetts comes next with 2,800; and Pennsylvania, a close third with 2,700.

Only four states, Mississippi, Nevada, Utah and Wyoming have no beds whatever in special hospitals or wards for consumptives. Eight years ago, when the National Association was organized, there were 26 states in which no hospital or sanatorium provision for consumptives existed, and the entire number of beds in the United States was only 10,000.

It is stated, however, that there are from 250,000 to 300,000 indigent consumptives needing hospital care. Without wishing to underestimate the needs of this unfortunate class, and without having made a thorough study of the economics of the problem—if indeed there are reliable statistics available—we venture the

opinion that the statement that there is accommodation for only one indigent consumptive in ten, is a trifle pessimistic. The tubercular mortality for the U. S. is commonly estimated at 150,000 a year and both the incidence and the mortality are gradually diminishing relatively to population so that some even claim a numeric decrease in spite of increasing population. It would seem that a hospital or sanitarium stay of two years is an ample allowance for each fatal case and that an equal allowance for non-fatal cases is generous. On this basis of calculation, there would be about 600,000 consumptives in the country, at any one time, requiring institutional care. It scarcely seems that half of them should be dependent on public charity; indeed, by age and sex incidence, more than half would normally be dependent on heads of families. However, we would not by any means discourage this worthy cause and there is not much use in disputing as to percentages when the need is so obviously far beyond the supply of institutional care.

Typhoid Vaccination

The health department is to be commended for arranging for "free vaccination" against typhoid. In making Buffalo the first city in the United States to adopt such measures to combat the second most deadly of diseases, Dr. Fronczak is but doing his duty.

To announce Dr. Fronczak's plan as "free vaccination" is a misnomer. Buffalonians are paying and paying dearly for the innovation. The taxpayers are paying for the vaccine. But that is a small item in the expense that they are made to bear. They are paying for the conditions which make necessary vaccination against typhoid. They have been assessed millions of dollars to pay interest for the Emerald channel intake on the representation that it would make a pure water supply possible. Its failure is attested by the high mortality rate as shown in the statistics of the state department of health.

We have appropriated the above from the *Buffalo Express* of July 2, as additional evidence of the keen interest and cooperative spirit of the lay press in regard to medical matters. There is one point however, in which we are deceiving ourselves, and by deceiving others, injuring ourselves as a municipality. Granted that, so far as improving the water supply, the enormous expense of the new intake has been practically wasted; granted that our water is still liable to contamination; the fact remains that, relatively, Buffalo has very good water and, relatively, very little typhoid. We are personally convinced that at least 50% of our typhoid is due to infection outside the city limits.

Changes at Syracuse University Medical School

This institution has added the following men to its corps of instruction: As assistant professor of bacteriology, Leverett Dale Bristol, A. B., M. D., Johns Hopkins, of St. Paul, Minn.; as instructor in the department of histology, Earl V. Sweet, A. B., M. D., Cornell, of Phoenix, N. Y.; as instructor in surgery, Albert G. Swift, M. D., Syracuse, of New York; as instructor in pathology, John W. Cox, M. D., of Syracuse. This position was secured by scholarship. At the suggestion of the dean, Colgate University has signified its intention of permitting students to take the senior year in a registered medical college *in absentia*, such students to receive the bachelor's degree upon the presentation of a certificate from the college of medicine attended, to the effect that his work has been done satisfactorily.

Medical Study Tour

The Study Tour of the 9th Session of the "*Association Internationale de Perfectionnement Scientifique*" has been organized by the Central Board as follows:

Concentration on the 8th August at Besancon.—Itinerary: Salzburg, Konigsee, Salt-mines of Berchtesgaden, Reichenhall, Tauern, Karawankes, Wochein, Adelsberg Grotts, Agram, Danube, Passages of Kazan, Iron Doors, Bucarest, Constantinople (Pera-Stamboul-Scutari), Sofia, Belgrade, Fiume, Abbazia (the Nice of the Adriatic), Trieste, the Peninsula of Miramare, Venice. Separation on the 30th August at Aix-les-Bains.

For particulars, write to "A. P. M. S." Office, 12 rue Francois-Millet, Paris XVIe.

We have received from Prof. M. A. Gilbert, of Paris, an announcement of special courses in clinical medicine and laboratory methods of diagnosis, beginning Monday, Sept. 23. The full announcement can be seen at this office. Paris has, in recent years, been neglected by American students; indeed, there has been a disposition to ignore French contributions to medicine. In perusing various medical works of the seventeenth and eighteenth centuries, the extent of accurate knowledge on the part of the French at that time, has been a source of wonder. Indeed, it has occurred to us that a revision of the erudite treatises on the lymphatic system, in the light of modern anatomy and physiology, is all that is necessary to develop a new field of clinical medicine. Post graduate study in London often proves unsatisfactory to the American, on account of the lack of punctuality and ir-

regular hours kept. Probably a third of the population of the U. S. is German and this fact, as well as the phenomenal industry and skill of the Germans in developing the scientific aspects of medicine, account for the tendency of Americans to seek post graduate work in Germany or Vienna. Moreover, the German language has become familiar to many Americans not themselves of German origin. The French in America have, too often, forgotten their ancestry and failed to learn their mother—or perhaps we should say their several-great grandmother—tongue. From personal experience, we can recommend the Parisian clinics, largely on account of the courtesy shown American students, though we would not imply any lack of such courtesy elsewhere, but also because of the quite American spirit of enterprise and energy, of practicality, and of keeping the main issue of the patient's welfare uppermost.

The New York City Society for the Prevention of Cruelty to Children has found, that of about 700,000 children of school age in the present year, over 1% are feeble minded. It recommends a preliminary investigation of the mental condition of all school children, the establishment of an institution for their care, and more efficient means of excluding defective immigrants. The last recommendation, though theoretically wise, impresses us as very difficult of execution. Imagine yourself trying to investigate the mentality of a shy and probably frightened child, speaking the rudiments of a foreign language, probably a dialect of that, necessarily ignorant of existing conditions, brought up in a very simple community where peculiar standards of social life prevail. How could you determine in a necessarily brief interview and examination whether the child was or was not feeble-minded—barring, of course, conspicuous defects? A point of the utmost importance, often overlooked, is that it is not the out-and-out idiot, with receding forehead, distorted features and obvious lack of judgment that needs protection, so much as the high-grade imbecile who, if a boy, is easily led into crime of which he has no proper realization and who, if a girl, is led astray sexually when the obvious idiot would be protected by her very repulsiveness or her plain appeal for chivalrous protection.

That sounds may by communicating vibrations to find particles, as of sand, or to a flame, or to an impressionable material as in the phonograph, yield visual impressions, has long been known. Dr. H. B. Williams of Columbia, has recently been carrying on a series of experiments with reference to the photographing of the vibrations of heart sounds, employing a string galvanometer, in connection with a microphone, and the movements of the quartz

of the former are magnified by being projected on a screen, the shadow on which is photographed.

Itinerants, calling themselves doctors and druggists, are at large in Buffalo, selling drugs and even diagnosing disease and prescribing. The Health Department has issued a public warning.

Buffalo is having an epidemic of measles, amounting to more than a thousand cases. Otherwise, there is very little sickness.

Tonawanda finds that considerable sewage has been directed into the State Ditch and the ditch has been obstructed by drift wood and other debris. The obstructions have been cleared away but there is a legal question as to who is responsible for the drainage of sewers, property owners claiming that they have been accepted by the city at previous inspections and that any expense of changes must be borne by the city.

Niagara County Supervisors have voted \$40,000 for a tuberculosis hospital. The annual mortality from tuberculosis in the county is about 90. Drs. Leo, Wolf and Scott of Niagara Falls, and Dr. C. N. Palmer of Lockport spoke in favor of the hospital. Mr. C. F. Nelbach of the Charities Aid Association stated that 24 of the 61 counties of the state have either established or voted to establish county hospitals.

The Public Service Commission has arranged for a simplified and more reasonable system of express rates. The extortion of our express companies and their influence in preventing the extension of a parcels post, has long been a national scandal. Re-county is about 90. Drs. Leo-Wolf and Scott of Niagara Falls, 80 miles away. It cost more than to send them singly at full postal rates, to any distance in the U. S., Canada and Mexico. Personally, we think it would have been better to have ignored the express charges altogether and to have provided for a gradual but rapid increase in weight and size of fourth-class mail matter, at reduced pound rates. An immediate change would have swamped the postal service.

A MEDICAL SHOPLIFTER.—The daily press has recently told a sad story of a well educated and formerly successful woman physician, of Boston who, after 25 years' practice has been fined and placed under the supervision of a probation officer for shoplifting. Such an occurrence naturally throws discredit on the

entire profession but there are two mitigating circumstances: she stole honestly and made herself amenable to the law instead of laughing at it as a "borrower"; and, when arraigned, she pleaded guilty and scorned the subterfuge of kleptomania.

HOW THE PROFESSION CHANGES.—A few nights ago, while waiting at a hospital for an operator, the editor in his alternate role, amused himself in studying one of those group pictures of prominent members of the profession, by which certain firms enrich themselves occasionally. This group included 158 Buffalo physicians in 1899. 27 were dead, 10 had departed for less remote places, 1 is retired, 1 has gone into another business. Almost exactly a quarter removed in 12 1-2 years.

The list of physicians for Buffalo, ten months ago (Sept. 15, 1911, prepared with the utmost care up to that date) numbered 661. This was a list of those entitled to practice, included some internes, several married women physicians, and quite a good many others not actually in practice. At a rough estimate, those really in private practice last fall numbered about 600. At least nine were engaged in other businesses and seven had retired. Since then, 15 have moved away, and four have died. Our subscription records show five new arrivals in the city but we believe several others have also located here.

Surgical Aspects of the D. L. & W. Wreck at Corning

THE BUFFALO MEDICAL JOURNAL took immediate steps to secure a full surgical account of the disaster but was unable to obtain more than a few details. The killed are said to have sustained fractures of the skull, in all instances. The seriously injured were, for the most part, cases of head injury, especially fractures of the jaw. One man had a multiple fracture of the upper jaw, a fracture and flattening of the nose and bled profusely from the mouth. There was also a severe facial laceration, crossing one eye but not involving the eye itself; and several fractures of the left leg between the hip and ankle. He survived the shock and the prognosis is good. Three other cases of head injury involved loss of consciousness. One, a woman remained unconscious for several days and a boy is still irrational at times but all three are regarded as progressing favorably. At Elmira, several fracture cases are being cared for. One case, that of a woman, included spinal paralysis and a fractured clavicle but is recovering.

The Lockport City Hospital is liable to be closed on account of lack of funds, there being apparently no legal authority for an additional appropriation.

The Corning typhoid epidemic has abated. The plan to bring water from Pennsylvania, as previously announced, has been abandoned in favor of deep local wells. An abundant supply of soft water has been struck by test wells, at a depth of 100 feet, on the Fuller farm.

The Tonawanda *Evening News* opposes the plan of the State Conservation Commission to build a storage reservoir on Tonawanda Creek, though admitting its usefulness for Batavia, Lockport, Albion, Medina, etc. This reservoir is estimated to afford a supply for 100,000 population. The *News* points out that the combined population of the Tonawandas and Niagara Falls is already nearly 60,000 and that it will soon exceed the capacity of any such storage scheme while the enforcement of the Federal regulations as to the pollution of the Niagara River is inevitable and will afford an inexhaustible supply of relatively pure water for the entire Frontier.

The N. Y. State Dept. of Health has organized a state-wide campaign of sex education among women and girls, to be carried on largely by women physicians.

A LEPER IN BUFFALO.—Sam Isen, a Russian Jew, who came to this country three years ago, was confined by the Bay City, Mich., authorities last spring as a leprosy suspect. Two weeks ago he escaped with the intention of returning to Russia (which scarcely corroborates the prevalent opinion regarding persecution in the latter country) and has been lodging in a public shelter in Buffalo for some time, waiting for funds. Dr. L. F. Anderson located him, with the help of a policeman and took him to the Ernest Wende Hospital where he is detained. Dr. W. S. Goodale reports that, to the casual observer, the case would not be obvious as the face shows no deep lesions. Macules and tubercles are, however, visible on the trunk. Bacilli were identified.

OUR CONTEMPORARIES

Getting Results From Prescribing

(Abstract from N. A. R. D. Propaganda)

The two legal standards, the United States Pharmacopœia and the National Formulary, contain some fifteen hundred de-

pendable preparations and for that reason should represent the greater part of the medical profession's armamentarium at the present time. Every capable pharmacist will stand sponsor for their quality, uniformity and activity, without exception.

The physician should be absolute master of his prescription at all times, therefore it is suggested that all prescriptions containing narcotic or habit-forming drugs, be marked "Do not repeat, or "non-repetatur." A word of explanation to the patient as to the reason therefor would be proper.

Through prescribing by the official titles or Latin names only, the great harm caused by self-medication will receive a severe setback, and the physician will add to his own professional standing, and incidently promote the interests of his patients. Further, we believe that it is as much to the physician's interests to specify "those pharmacists who properly conduct their pharmacies," as it is to specify "an ethical preparation." [Note our advertisers.]

Many owners and clerks in department stores and in some cut-rate drug stores who have a greater leaning toward the almighty dollar than toward honor, receive substantial commissions from the makers of many special lines of remedies, to boost and even substitute the latter products, contrary to the physician's wishes and implied instructions. Therefore it would be considered good judgment on the physician's part to exercise his prerogative in informing the patient where *not* to have his prescriptions filled.

There follows a detailed description of *Pilulæ Ferri Carbonatis*, U. S. P., and of *Elixir Taraxaci Comp.* N. F.

Physicians' Investments

The *Physicians' Business Journal* is defunct but its spirit lives.

The *Clinical Reporter* says: "So keep your books that when a patient asks for his account you may render it with promptness and joy, not with trembling and hesitation."

"If you by any chance get a few dollars more than you need to pay expenses do not pass it over to the smooth tongued promoter. Trained speculators are looking for 'good things,' and do not allow big profit schemes to go a begging."

The *Medical Council* devotes a whole section to the Business Side of Practice, including articles on Irresponsible Pecan Pro-

moters, Delusive Land Promoters, Personal Experience in Stock Investments besides two or three items which ought to elicit libel suits if the firms mentioned are not criminally liable.

One of the western states (The exact reference has been mislaid) has what is popularly termed "The Blue Sky Law" in allusion to the fact that it is aimed against promoters who are selling nothing more tangible. This law requires a license to sell stock and only a few of a large number of corporations applying have been given licenses, the remainder having been shown to be fake concerns. Yet one would suppose that no application would be made unless some evidence of good faith could be shown.

One of the writers in the *Council* reports excellent results from a conservative, local, investment in real estate in which he vainly tried to interest some medical friends who preferred slips of paper called stock.

We are glad that the medical journals are taking up this matter. It is high time doctors ceased to be classed as easy marks.

If a Man is Wise He Will Not Work at Home, But Elsewhere

In an article on "The Man of the House" in the *March Woman's Home Companion*, the author, Margaret E. Sangster, says:

"The man of the house should not be the man in the house all day long, if it can be helped. If he be an artist with a studio at home, a minister with a study at the top of the house, a physician with office hours, or any other man who is accustomed to carry on his work at home, the household accommodates itself to him, and in a sense ignores his presence. It is true that he is constantly subjected to interruptions when he works at home, his wife softly opening the door to say, 'The milkman has called for his bill, and cannot make change,' or, 'Somebody has asked for you at the door. Will you not go down and see him?' or, 'Do pardon me for breaking in upon your work, but Aunt Jennie has just telephoned that she is coming to luncheon. Won't you step over to the butcher's and get a porterhouse steak?'

"It is not quite ideal for the man of the house to do his work at home. For his personal convenience and comfort it is preferable that he should do it elsewhere. The temptation to run in upon him, to read a letter, tell a bit of news, or ask advice, is too great for the average woman to overcome.

"Also, he gains something in the estimation of the family by going away in the morning and returning at night, while for himself there is the manifest advantage of a charming and restful change of scene when he steps within his front door to be stormed

upon with kisses by the children and welcomed by his true comrade and partner on the road."

All of which is very true and somewhat unfortunate for the average physician who can not conveniently manage an office apart from his residence.

American Medicine, June, 1912, announces that its gold medal for "the most conspicuous and noteworthy service for humanity, in the domain of medicine during the past year," by an American physician, has been conferred upon Col. William Crawford Gorgas, Chief Sanitary Official of the Canal Zone.

The same journal deplores the small attendance at the A. M. A. meeting, appeals to the profession to take a more active interest, and offers the friendly criticism that such interest might be forthcoming if the profession generally had some part in the management of affairs. In particular, it suggests that the President should be more than a figure head and should, at least, have the veto power.

We acknowledge the courtesy of *American Medicine* in abstracting our article on the Economics of Food from the *Interstate Medical Journal* of April, 1912.

The *St. Louis Medical Review*, June, 1912, reprints our article on Wild Parsnip Poisoning, from the April issue.

Merck's Archives, June, 1912, reprints Col. Floyd S. Crego's article on Meningitis, from our March issue.

The *Medical Standard*, July, 1912, contains a full abstract of Dr. A. H. Noehren's article on Traumatic Finger Amputations, from our June issue.

The *Dominion Medical Monthly* comments as follows:

The National Insurance scheme of Mr. Lloyd George has now been before the English public for one year, yet success for the measure is not in sight.

That the medical profession is not treated fairly by this measure there are many evidences other than those set forth in the medical press.

The new move by the profession, designed to bring Mr. Lloyd George to his senses, is for the doctors to cut off all their contract relations with friendly societies.

It seems that the profession mistrust the insurance committees of the friendly societies, for on these committees the doctors will be in the minority.

The British Medical Association, through its State Sickness Insurance Committee, is now pledging members to resign from club and lodge practice and not to accept appointments under this Act.

The accompanying picture is taken from the *Burning Bush*, one of the batteries of the church militant. The *Burning Bush*



believes in some things that the average professional man does not, and vice versa but it stands for sincerity. It hits hard at the hypocrisy of an orthodox church passing over to liberalism or altering its time-honored standards to insure popularity among the young folks. The meanest part of such hypocrisy is that it undermines and seeks to steal the proper reward of the heterodox organizations which, half a century or more ago, suffered the persecutions of the orthodox. But our readers will be most interested in the campaign of the *Burning Bush* against the prostitution of religious papers in advertising nostrums.

BUFFALO MEDICAL JOURNAL

A Monthly Review of Medicine and Surgery

EDITOR

A. L. BENEDICT.

All communications, whether of a literary or business nature, books for review and exchanges, should be addressed to the editor, 354 FRANKLIN STREET, BUFFALO, N. Y. Please make personal or telephonic calls before 1 p. m.

THE BUFFALO MEDICAL JOURNAL will publish regularly, full transactions of any professional organization in western New York at cost. Personal notices, brief reports of society proceedings, and the like, are always welcome and will be published without charge.

Subscriptions may commence at any time. \$2.00 per year in advance,

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AUGUST, 1912

No. 1

It is wickeder to be idle on week days than to work on Sundays.

The Past Year and the Future

It is more than a year since the present editor began, informally, to assist in the conduct of this JOURNAL, a little less than a year since he assumed full charge—reluctantly, from apprehension of interference with more practical and more necessary work. Thanks to the unanimous and cordial support of the profession, this apprehension has proved to be unfounded and, with increasing familiarity with details and improved assistance, the additional labor will probably prove less exacting. With allowance for subscription sharing, the subscription list for Buffalo and neighboring towns is estimated to be within about 80 of a possible maximum. For Rochester, we need about 50 more subscriptions, and the same number for the towns in that zone of our territory. To the east and south, the field for extension increases as the radius lengthens. The appointment of Associates conveniently located has proved to be wise from every standpoint, and local centers will probably be added as the need arises. While the JOURNAL aims especially to serve western New York as a medium for exchange of news, lines of political geography are arbitrary and we have a considerable circulation in Ontario, Pennsylvania and Ohio, following established lines of travel. With no special effort toward a general circulation, we also mail to almost all states and countries of the globe, and this circulation is gradually

increasing, almost every day's mail including requests for samples or comments showing that the work of our contributors is appreciated, and that we reach, indirectly, localities that we do not realize.

We wish to impress on our readers the importance of putting forth their best literary efforts in the field of their practice and upon our readers throughout our territory that we wish to serve all parts of it equally, in all ways. The JOURNAL is the third oldest in this continent, it was original called the BUFFALO MEDICAL JOURNAL and, with some slight variations, has always borne that name and it is printed in Buffalo, so that it seems inadvisable to change the name, if indeed, any short designation could be found to indicate its rather broad local scope. Figures speak eloquently and this is our apology for impressing on our readers in a rather sordid way, the debt they owe the advertisers, in the way of careful attention to the advertisements. Each copy mailed to a Buffalo subscriber costs \$2.05 for printing and mailing alone; each copy to a neighboring town about 1.90—providing that payments are made without requiring bills and receipts and without exchange. After passing the first thousand of the profession, outside of Buffalo and neighboring counties, a small gross profit exists but, at the maximum estimate of circulation, not sufficient to publish a journal of the same size without advertisements, unless a very broad and large field could be covered by an entire change in policy and scope.

Notwithstanding, the JOURNAL inforces, so far as possible, the highest standard of advertising ethics, including those of simple honesty—as the fulfillment of a contract, however conflicting with personal opinion—fair play, and common sense. In the last ten months, enough advertising has been refused to pay the expense of more than one issue. We invite suggestions on this, as well as other points.

Scientific material of the highest grade is available among our own subscribers but we shall, from time to time, include articles from distant parts, especially Europe. Several of the most important advances in professional achievement and policy, especially along educational and legislative lines, have originated in western New York. At least three such movements have started within the last year and a half, have been first published in this JOURNAL, and have set up sympathetic vibrations throughout the profession of the country. —

The Domestic Pet

IT cannot be denied that domestication of animals has played a very important part in the civilization of the human race. The economic value of draft, milch, wool bearing and meat yield-

ing animals, kept in captivity, trained to assist man in his labors or available as needed to supply his wants, requires no argument. It is not generally realized that the relative abundance of such animals in the eastern hemisphere and their almost entire absence in the western, is, without any other factor, sufficient to account for the different rates of progress of man in the old and the new world. With the exception of the llama, a domesticated huanaco, the paco, the turkey and certain central American fowls and rabbits, there were no domesticated animals in America prior to its discovery by Europeans. The llama was merely a pack animal, able to carry not much more than 50 pounds, far inferior to the camel or dromedary in all ways and, not being able to survive long in low altitudes, it could not have been utilized as a draft animal. The paco is far inferior to the sheep, as a supply of clothing. It is said that no animal indigenous to the new world would produce milk in captivity, and it is doubtful if the buffalo, deer and goats of the new world were susceptible of domestication.

These statements must be qualified by excepting the far north of America, where certain deer and dogs or domesticated wolves, played a useful role as in eastern arctic regions.

They must also be qualified, if we employ the word *domesticated* in the minor sense of *pet* animals. Various birds, and dogs were more or less domesticated by various Indian tribes; so, too, captive bears and other wild animals were rather frequent sources of amusement. The dog, in the absence of herds and flocks of more useful animals, obviously could not fulfill his old world function of a shepherd's assistant; in a roadless country, he could not be used as a draft animal to any extent except when a crust had formed on snow; there being for the most part, little private property and little personal dishonesty, he was of slight value as a watch dog, though he might give an alarm when a village was attacked at night. It does not even appear that the Indian trained the dog to any great degree as a help to the hunter.

But, quite apart from the main economic value of domestic animals so conspicuous in the old world, and whose absence was so conspicuous in the new world, the mere fact of domesticating, disciplining and controlling and looking after the welfare of lower animals, helped mightily to civilize man, to teach him self control and self denial, and to develop the sense of responsibility. Every instance of cruelty and neglect, brought him loss and even suffering, and thus taught the lesson of mercy and prudence. To a limited degree, therefore, the Indian enjoyed the civilizing influence of domesticated animals, in common with our own ancestors and other natives of the eastern continent.

The realization of the educative, as contrasted with the economic value of association with the lower animals, survives in the old fashioned belief that it is a good plan to bring up children with cats and dogs and in the persistence of domestic pets of no practical use whatever.

But, with the increasing concentration of population and the growing appreciation of applied bacteriology, we are, at least in cities, coming very near the point at which the direct relations of man and lower animals must be discontinued. Already, in most large cities, there is a restriction or even prohibition, more or less strictly enforced, of the keeping of any practically useful animal or fowl. Dogs are usually subject to capture and destruction unless tagged. Cats are notoriously less perfectly domesticated and no practical system either of license or of systematic destruction has been evolved. Other small animals, birds, etc., are ignored.

The dog laws are based on a somewhat exaggerated notion of hydrophobia and certain misconceptions as to its times of prevalence. It is almost certain that many cases of so-called hydrophobia are tetanus, non-specific sepsis or hysteria. Some extremists indeed deny that there is such a disease as rabies. Ecchinococcus disease, fortunately still rare in America, entozoa, ectozoa as carriers of septic germs, tuberculosis, diphtheria and exanthemata conveyed adventitiously in the hair, are, quantitatively, much more important dangers from the lower animals than rabies. In fact, it may be said that any infection to which man is liable, is apt to be disseminated by domestic pets, either through their own infection, or accidentally. With the hygiene of the animal impaired by confinement, and the opportunities for conveyance magnified by density of population, it becomes more and more questionable whether the educative advantages, companionship and interest to be credited to the dog—or to any other domestic pet—counterbalance the physical risk.

Dwellers in the country or even in fairly large cities, can scarcely realize the objection to the dog in the really great cities, solely on account of his evacuations. It is true that those of the horse are quantitatively much more important but, save for the occasional presence of the tetanus bacillus which, to become infective, requires introduction beneath the skin and exclusion of air, horse manure is only slightly objectionable and scarcely an item of hygienic anxiety except regarding the breeding of flies. The practical value of the horse still far outweighs the disadvantage of his excrement. Indeed, the very bulk of the latter necessitates street cleaning which would be otherwise desirable but would probably be neglected, while its physical properties

facilitate the collection of other, more dangerous dirt, much as tea leaves facilitate domestic sweeping.

The deposits of the dog are more offensive and are almost as definitely limited to sidewalks, etc., as those of the horse are to the street. In closely built cities, there are often for miles, no grass plots or other places where the dog can deposit his filth. Even the roofs, which in recent times have become the recognized offsets for the lack of yards in great cities, are in New York and analogous European cities, highly contaminated. Probably bacteriuria, at least involving any disease germ, is rare in dogs. But unless highly trained, every dog has two dominant impulses, first to detect every perpendicular object upon which any other dog has urinated and to follow suit; secondly to start as many other spots of the same kind as possible. These impulses are so well marked and so peculiar as to suggest a sort of undeveloped religious principle. Even if hygienically significant canine bacteriuria occurs once in a million cases, the chance of infection is, by this habit, multiplied by millions. Eventually, the minute chance of danger becomes actual.

The presence of dogs—not to mention cats, etc.—in large cities, also has certain sociologic bearings. There is no mental uplift at the common sight of a girl tugging at the leash of a large dog practicing the elemental principles mentioned, or others which need not be mentioned, or deliberately urging him to the daily hygienic task. There is even less uplift when she is subjected to the comments of a crowd of unclean-minded little boys and grown hoodlums. Is it too far fetched to suggest that the dog in dense centers of population has something to do with developing indelicacy and, ultimately immorality?

Where Will the Empire State Stand?

LAST year, in the *Medical Times* of New York, we commended the action of the University of Buffalo, in taking the initial step toward securing a higher matriculation standard. Allusion was made to the same matter in the September, 1911, issue of this JOURNAL. The following, from the *Bulletin* of the Illinois State Board of Health, needs no comment.

"Colorado now requires that a student who was matriculated in 1908-09, and graduated in 1912, shall have had one year of college work as preliminary training. This requirement is increased to two years in the case of students matriculated in 1910-11, and graduated in 1914.

The Colorado requirement, however, will not be imposed on those students, or practitioners, who take the examination of the Colorado State Board of Medical Examiners. It applies only to those receiving their licenses on credentials from other States.

The other States exacting one or more years of college work are as follows:

State	Years	In force	Affecting graduates of
Connecticut	1	1910	1914
Indiana	1	1910	1913
Indiana	2	1911	1914
Iowa	2	1911	1915
Kansas	1	1910	1914
Minnesota	2	1908	1912
North Dakota	2	1908	1912
South Dakota	2	1907	1911
Utah	1	1913	1917

In Utah the advance requirements are specifically provided for by law. In the other States mentioned they have been prescribed by the rules of the State medical board.

Second Class Postal Rates

IT has been a surprise to us that the Post Office, after having shown a surplus for the first time in its history, should have been so insistent on the raising of second class rates. Mr. Wilmer Atkinson, Editor of the *Farm Journal*, explains this by the statement that over seven millions of expenses have been carried over into the present fiscal year. Another inexplicable fact in the controversy over second class rates is the obstinate contention that the post office loses something like 7 cents a pound on cent-a-pound matter, when its aggregate, per capita and net profits have steadily increased as second-class mail matter has increased.

The practical point for our readers to consider is this: Do you want to pay more for all of your periodical reading matter or would you rather have the government make good a slight deficit in the Post Office by an indirect tax or by foregoing a battle ship or in some other indirect way? It makes comparatively little difference to the *BUFFALO MEDICAL JOURNAL* or to other monthlies of moderate weight but, in the long run, a postal surplus will cost the people dearly.

An Early Crusade Against Criminal Abortion

In September, 1858, the *Buffalo Medical Journal* called attention to this evil, and called upon the profession and the lay press to cooperate in a campaign. The advertisement of regulators in religious papers was emphatically denounced. A spirit of cooperation was evidently aroused and several letters on the subject and additional editorial articles were printed. One physician reported a peculiarly harrowing case of a widow who im-

portuned him to get her out of trouble. He refused but was called, in the course of a few weeks to attend her. She had taken some abortifacient whose nature she refused to disclose, had given birth to a living though premature infant and had burned it alive.

This is only one of many matters demanding professional attention that have illustrated the progressive spirit of the western New York physicians, as voiced in their JOURNAL.

WHAT MAY HAPPEN. "We are afraid that we shall have to dun in our next issue. It will be only dire necessity that will drive us to the alternative of asking for our due, therefore we beg those indebted to us to communicate....." The foregoing was printed in the *Buffalo Medical Journal* of August, 1858. The present editor is very glad to state that there are comparatively few delinquent subscribers. Bills are inclosed in the present issue and we would appreciate a prompt response, not so much for obvious reasons as that attention to subscription receipts at the beginning of the year and en masse, simplifies bookkeeping, allows valuable times to be devoted to matters of greater interest to readers, instead of to sordid business details, strengthens our position with the postoffice and with advertisers. Any errors in bills, addresses, etc., should be reported immediately.

CORRESPONDENCE

Buffalo, N. Y., July 16, 1912.

Dear Doctor:—

A few scattered cases of *infantile paralysis* have recently occurred in Buffalo and in neighboring towns. The attention of the profession is called to the necessity of immediately reporting the disease to the Health Department. It is also suggested that cases of temporary paralysis of the extremities, meningitis and neuritis of the limbs may be atypic poliomyelitis. The diseases is communicable and is often spread by so-called abortive cases simulating influenza or acute indigestion.

A prompt report to the Health Department and a strict quarantine may prevent a dangerous epidemic.

Health Commissioner Fronczak is in accord with this communication.

IRVING M. SNOW, M. D.,
L. KAUFFMAN, M. D.,
Committee on Poliomyelitis,
Buffalo Academy of Medicine.

Mr. Editor:—

Seeing various cases reported in medical journals (*N. Y. Med. Jour.*, Mar., 1912; *Bfo. Med. Journ.*, Apr., 1912) regarding results obtained from use of Dowd's Phosphatometer and Phosphorus Tonic, stimulates me to offer you a case reported for publication that to my mind is as important as, if not more so than those already reported.

Mrs. S., aged 29, married.

A more typical case of articular rheumatism it would be hard to find than presented by Mrs. S. when I called to see her. She had been ailing for some time and upon my first visit presented swollen joints with severe pain most typical of rheumatism. She was unable to raise her arms above the waist line and her feet were so tender and swollen that it was necessary for her to wear shoes two sizes larger than normal.

Under the most careful treatment and diet she did not improve and I advised her to go to a mineral spring quite noted as a cure for rheumatism. She remained there for six weeks but instead of improving she grew worse and finally returned home.

Having heard the remark of Dr. J. Henry Dowd of Buffalo that many cases of pain supposed to be due to rheumatism, were not rheumatic pains at all, but the nerves crying for food, I sent her to Buffalo for consultation.

Dr. Dowd reported to me that after careful examination he found albumin due to anemia; no pathological condition, but an alkaline urine with a phosphatic index scarcely perceptible, about 96% minus; that the condition was neurainidia, nerve cell starvation, with a marked hysterical element.

She was put on the Dowd Phosphorus Tonic with valerian and improvement was evident in a few days. In four or five weeks she was entirely free from pain, could dress herself, in fact was practically well and had gained 95 pounds. (Four months after, she was well, no pain and in first class condition.)

In several other cases I have had most gratifying results from this tonic, especially where I have used it in connection with the Phosphatometer.

Yours truly,

W. A. MacPHERSON, M. D.

Tonawanda, N. Y.

NEW INVENTIONS

F. R. Anderson, Providence, R. I. 1,030,861. Foot and Ankle Brace.

Georg Ornstein, Berlin, Ger. 1,030,916. Process of Producing Acetylene Tetrachlorid.

G. A. Peate and Thos. Beattie, Montreal, Que., Can. 1,030,964, 1,030,965. Device for Preventing and Curing Stammering and Stuttering.

A. A. Finta, Chicago, Ill. Assignor to The Child's Welfare Garment Co. 1,030,989. Infant's Garment.

W. G. Euston, St. Louis, Mo. 1,031,109. Resuscitating Apparatus.

Elise Conrad, Milwaukee, Wisc. 1,031,247. Antislipping Attachment for Crutches.

D. L. Aber, Pittsburgh, Pa. 1,031,314. Surgical Instrument.

Levey McCoy, Memphis, Tenn. 1,031,565. Embalming Apparatus.

Fred'k Soddy, Glasgow, Scotland. 1,031,593. Process of Making Crystals containing Mesothorium.

L. L. Zarbaugh, Toledo, Ohio. 1,031,609. Syringe-Nozzle Attachment.

Frank Kuhn, Detroit, Mich. Assignor to Amer. Electrical Heater Co., Detroit, Mich. 1,025,144. Electric Foot-Warmer.

E. M. Grindle, Holton, Kas. 1,025,265. Cheek-Distender.

Jas. Birrell and Wm. Birrell, Seattle, Wash. Assignors to Birrell Vacuum Vibrator Co., Seattle, Wash. 1,025,504. Combined Vibrator and Vacuum Apparatus.

C. A. Howe, Chicago, Ills. 1,025,571. Foot-Support.

T. J. Donovan, Syracuse, N. Y. 1,025,612. Bathing-Machine.

R. M. Machlett, New York, N. Y. 1,025,635. Gas-Regulator for Gas-Tubes.

D. M. Don Jian, Washington, D. C. 1,025,903. Device for Removing and Curing Corns.

H. W. Sanford, Washington, D. C. 1,025,207. Surgical Kit.

J. F. Craven, Pittsburgh, Pa. Assignor to Craven Engineer-
for containing and discharging semisolid and pasty substances.
for containing and discharging semisolid and pastry substances.

Otto Schmidt, Mannheim, Ger. Assignor to Badisch Anlin & Soda Fabrik, Ludwigshafer-on-the-Rhine, Ger. 1,025,652. Chlor-Aralkyl-Sulfonic Acids and process of making such compounds.

Heinrich Hoerlein, Vohuxnkel, near Elberfeld, Ger. Assignor to Farbenfabriken vorm. Friedr. Bayer & Co. 1,025,872. Phenylethylbarbituric Acid.

Nathan Sulzberger, New York, N. Y. 1,025,889. Chloral Devivatives containing the Radical of a Fatty Acid.

Otto Liebknecht Frankfort-on-the-Main, Ger. Assignor to Roessler & Hasslacher Chemical Co., New York, N. Y. 1,025,948. Stable Hydrogen-Peroxid Solution.

Chas. DeBock, Lele, Belgium. 1,023,803. Sucking Bottle.

Arthur Dubay, Gardiner, Me. 1,023,822. Teething Finger.

Henry J. Smith, Philadelphia, Pa. 1,024,152 and 1,024,153. Method and Means for Producing Dental Plates.

Moritz Saenger, Madgeburg, Germany, 1,024,422. Medical Spraying Syringe.

G. J. Kelley, Attleboro, Mass. 1,029,689. Vaginal Syringe.

F. R. Kunkel, Edgewood Park, Pa. Assignor to Westinghouse Elec. & Mfg. Co. 1,029,696. Massage Apparatus.

J. E. MacWilliam, Hubbardston, Mass. Assignor to F. A. MacWilliam, Hubbardston, Mass. 1,029,813. Nasal Douche.

J. W. Bates, Hastings, New Zealand. 1,029,841. Evaporating and Fumigating Apparatus.

E. W. Caldwell, New York, N. Y. 1,029,250. X-Ray Tube.

H. C. Folger, Somerville, Mass. Assignor to Nu-Vo Mfg. Co. 1,029,861. Electric Hair and Scalp Treating Instrument.

Mose Wilbuschewitsch, Nischniowgerod, Kanairno, Russia. 1,029,901. Process of Manufacturing Catalysts.

K. L. Storm, Philadelphia, Pa. 1,029,955. Abdominal Supporter.

Alek Bauer, Chicago, Ill. Assignor to Bauer & Black, Chicago, Ill. 1,030,224. Convertible Suspensory and Supporter.

C. P. Beckwith, Detroit, Mich. Assignor to Parke, Davis & Co., Detroit, Mich. 1,030,378. Appartus for Discharging Liquids in measured quantities.

L. A. Saunders, Los Angeles, Cal. 1,030,543. Syringe with Electric Attachment.

J. M. White, Danville, Va. 1,130,696. Bottle-Indicator.

Geo. E. Graham, Candor, N. Y. 1,024,506. Combination Reflecting Means for Enabling one to see the back of the head and the back of the neck.

F. C. Searle, Wilmington, Del. 1,024,527. Burial Vault.

Graham Clark, Cleveland, Ohio. 1,024,556. Attachment for Anesthetizing Machines.

Claes W. Boman, New York, N. Y. 1,024,824. Clinical Thermometer Casing.

J. M. Baber, Henrietta, N. C. 1,024,966. Operating Table.

L. L. Miner, Bisbee, Ariz. 1,025,008. Brace for Fractured Bones.

Elsie R. Norwood, San Francisco, Cal. 1,025,012. Water Bag Retiner.

B. S. Lacy, Dubuque, Iowa. 1,031,720. Nursing Bottle Nipple.

T. M. Merck, Gainsville, Ga. 1,031,724. Truss.

W. H. Eblen, Windrock, Tenn. 1,031,841. Obsteric Appliance.

Mary J. F. Grundy, Chicago, Ill. 1,031,861. Antichafing and Menstrual Garment.

J. B. Young, Cumberland, Ind. 1,031,901. Thermometer-Case.

G. E. Marks, New York, N. Y. Assignor to The Firm of A. A. Marks, New York, N. Y. 1,032,074. Artificial Leg.

W. S. Hay, Providence, R. I. Assignor to Davol Rubber Co., Providence, R. I. 1,032,333. Automizer.

PERSONAL

(We would greatly appreciate the courtesy of contributions to this and other news departments.)

The editor notes that the new directory of the A. M. A. has acted as god-father, bestowing on him Dr. Bennett's front name. At various times, this name, most of the Christian names beginning in Al-, and a miscellaneous assortment of Old Testament names beginning with A, have been conferred by the kindly disposed. For a plain man, the initials are plenty and the editor would appreciate the courtesy of a correction by any possessing the directory, to A. L. Benedict, the full legal name.

On July 3, Dr. Ray H. Johnson of Buffalo, had a collision with another automobile and was cut in the head and face by broken glass. We are glad to note that he has fully recovered.

Dr. Mary B. Wetmore has sold the residence on lower Franklin St., Buffalo, so long occupied by her late husband and herself and has moved to the Matthewson, corner of Tracy and Morgan Sts.

Dr. Harold J. McDonald has been appointed District Physician for the first district of Buffalo at a salary of \$500 and Dr.

Charles Leone for the sixth district at a salary of \$400. The districts will soon be rearranged on an equal basis of population and at equal salaries—which we can state from personal experience in 1890, to be far from equable. The city physicians are almost the only city employees who are not paid a fairly adequate salary. At the lowest estimate, with full permission to engage in private practice, the salaries should be at least \$1000. We are inclined to favor a service at double this sum, requiring exclusive attention.

Dr. A. E. Collins of Buffalo, had his automobile turn turtle on July 12. He was badly bruised and was at first thought to have sustained spinal injuries.

Dr. Frederick Seliheimer of Buffalo, returning from Lackawanna, on July 12, found a young eagle had flown into his automobile. This is the first time we have heard of this kind of a bird entering an automobile without an invitation.

The members of the Oneida County Medical Club held their third annual outing yesterday at the Spring House at Rexford Falls. After dinner, which was served by Landlord F. J. Mulligan, trap shooting and a game of base ball were enjoyed. Those present were: Dr. C. H. Baldwin, Dr. R. L. Baker, Dr. C. R. Hart, Dr. W. J. Schuyler, Dr. A. M. Johnston, Dr. T. C. Gifford, Dr. W. B. Roemer, Dr. W. H. Beattie, Dr. J. E. Gage, Dr. Andrew Sloane, Dr. F. S. DeLong, Dr. F. R. Ford and W. Bauer.

Dr. Frederick W. Bentley of North Tonawanda, has returned from a trip to Lake George.

Dr. Chas. Ferdinand Durand, late Proctologist of the German Hospital, Buffalo, has opened an office at 590 Huron Street, Toronto. His practice will be limited to diseases of the rectum.

Dr. Martin B. Tinker of Ithaca, has recovered from the effects of an automobile accident.

Dr. James Wright Putnam sailed for Norway in July, he will return to Buffalo Sept. 1.

Dr. Jacob S. Otto has been appointed Assistant Prof. of Therapeutics; Dr. A. E. Woelmert Asst. Prof. of Clinical Medicine; Dr. W. W. Plummer Asst. Prof. of Orthopaedics and Radiology; Dr. Carl S. Tompkins Clinical Pathologist, in the Medical Dept. of the University of Buffalo. All are residents of Buffalo.

Drs. Peter W. Van Peyma, Edward J. Meyer, George F. Cott, Harry Mead, Henry Stadlinger of Buffalo, have been appointed a committee of the Alumni of the Medical Dept. of the University of Buffalo, to manage and increase a fund of \$4000 raised by the Alumni to further medical education.

Dr. George J. Haller of Buffalo, has returned from Europe.

Dr. James P. Barr of Buffalo was recently thrown out of his automobile in a collision with a street car and had several ribs broken.

Dr. J. Walter Fitzgerald of Buffalo, is in Europe.

Dr. H. J. Benedict of Danbury, Conn., is motoring through the Adirondacks.

Dr. George W. T. Lewis of Buffalo, is at Lake Moraine, Hamilton, Ont.

OBITUARY

Dr. William Hailes, Albany Medical College, 1870, died July 6, aged 62. He was Prof. Emeritus of Pathologic Anatomy and Histology in his alma mater and Attending Surgeon to the Albany and St. Peter's Hospitals.

Dr. Zippie Brooks Wales, of Elmira, wife of Dr. T. A. Wales, died July 4, following an operation, performed June 22. She was born in Winhall, Vt., and was a sister of Mrs. Dr. S. O. Gleason who, with her husband, established a well-known sanitarium. She was married to Dr. Wales Sept. 26, 1872. The following year, both graduated in medicine, he at the University of Pennsylvania, she at the Woman's Medical College of Philadelphia. After being associated with the Drs. Gleason in sani-

tarium work for some years, they engaged in private practice in Elmira. Dr. Zippie Brooks Wales was a prominent member of the Daughters of the American Revolution, of the Humane Society, and of various other philanthropic organizations.

Dr. Ellis Vanderslice Ivey, a Bellevue interne, was killed in the D. L. & W. wreck at Corning, July 5.

Dr. Henry Delos Blanchard, Albany Medical College, 1882, of Portlandville, N. Y., died suddenly in a restaurant at Oneonta, June 26, from fatty degeneration of the heart. He was formerly president of the Otsego Co. Medical Society.

Dr. Juan Garcia Puron died in his birth-place, Llanes, Asturias, Spain, June 9, aged 58. He was known to the American profession by a long career with the Appleton Publishing Co.

Dr. Malcolm Ney McNaughton, Buffalo, 1868, died at Villisca, Ill., June 23, aged 63. Dr. McNaughton was a good example of the negative inference from the old adage that a rolling stone gathers no moss. He began practice in Villisca almost immediately after his graduation and, for some time before his death, was president of the First National Bank.

Dr. Allen Gideon Tripp, Syracuse, 1900, a resident of Cicero, N. Y., died at the Hospital of the Good Shepard, Syracuse, June 28, aged 43.

Dr. Alfred W. Henckell, Buffalo, 1889, died June 30, at his home 529 West Ave., Rochester, aged 46. He leaves a wife, Mrs. Ida Orphy Henckell; two daughters, Esther Henckell, aged 13, and Marion Henckell, aged 12; a mother, Mrs. Rosalie A. Henckell of 66 Lenox Street, Rochester; two brothers, Carl Henckell of Birmingham, Ala., and William Henckell of Silver Springs, Md., and a sister, Mrs. H. F. Galvin of Boston. He was a son of the late Rev. Emil Henckell, who was pastor of the German United Evangelical Trinity Church in Allen Street.

Dr. Henckell was born in Germany in 1866 and his parents came to America when he was 4 years old. He was educated in the common schools and the old Free Academy. He studied medicine in the University of Buffalo and was graduated there in 1889, at the head of his class. He went abroad for study and travel for one year and returned to Rochester, where he began

his practice in 1890. He had been in continuous and successful practice since then.

In 1896 Dr. Henckell was married to Miss Ida Orphy. He was a prominent member of the Masonic fraternity, a member of Monroe Commandery, Knights Templar, and of Damascus Temple of the Nobles of the Mystic Shrine. He was a member of the American Medical Association, New York State Medical Society, Central New York Medical Association, Monroe County Medical Association, Rochester Pathological Society and Rochester Academy of Medicine.

Dr. Arthur H. Pellette of Whitney Point, N. Y., a graduate of the N. Y. Homeopathic College, 1880, died at Binghampton, July 6.

Dr. D. M. Murray, 32 years old, of Brooklyn, N. Y., a prominent physician of that city, was drowned at Reeb's Bay, just west of Port Colborne, on Sunday, July 21.

BOOK REVIEWS

DIAGNOSTIC METHODS, CHEMICAL, BACTERIOLOGICAL AND MICROSCOPICAL, by *Ralph W. Webster, M. D., Ph. D.*, Chicago; published by P. Blakiston's Son & Co., Philadelphia. 682 pages. 37 full page plates. 164 other illustrations, \$4.50 (second revised edition.)

Both author and publisher have done their work well, making no attempt to secure a superficial appearance of novelty and originality by departing from established classifications and methods. The work, therefore enters directly into competition with others along the same line and we can scarcely express a preference.

TEXT BOOK FOR NURSES Anatomy, Physiology, Surgery and Medicine by *E. W. Hey Groves, M. S., F. R. C. S., and J. M. Fortescue-Brickdale, M. A., M. D.*, Bristol, Eng. Oxford University Press, London. 405 pages, 205 illustrations, including colored plates. Price \$4.50.

Few books are so elegant typographically and pictorially. The volume of the work is significant when one considers that it is not primarily nor systematically one on nursing and that it does not contain dose tables and a discussion of materia medica as such. The authors have presented a resume, necessarily brief in details but astonishingly full in scope, of practically the whole science and art of medicine, with the endeavor to give the nurse a broad view of her duties or, rather, of the duties of the surgeon or physician whom she assists. There is a well known and well marked difference of opinion as to the advisability of attempting to ground the nurse in general principles of medicine, many holding that

the appallingly self-sufficient nurse of English fiction results in real life, from too broad and too shallow instruction. Those who hold this view, will certainly censure the authors for preparing such a book though they must admit that it is an excellent one for the physician himself to use in refreshing his memory. Those holding the opposite view will find their ideal text book to place in the hands of the nurse.

THE CARE OF THE SKIN AND HAIR, by *William Allen Pusey, A. M., M. D.*, Prof. of Dermatology, University of Illinois; published by D. Appleton & Co., New York. 182 pages.

This practical little hand-book, by our class-mate at the University of Pennsylvania, is dedicated to his wife "without whose patience and indulgence such excursions as this were impossible." Translated in the light of our own experience, this means that physicians' wives make very practical and insistent demands for definite means of relief of conditions that we are too prone to regard as trivial or that we attempt to pass off as inevitable or that we try to dodge as "out of our line." And yet, a great many women lose much that is best in life, just because, as a profession, we fail to "deliver the goods"—to descend to a vulgar expression, and we fail simply because we regard "the goods" as unimportant. The great majority of the "goods" that we order throughout life, are trivial but we want them, never-the-less. Too often, the medical profession assumes the dignity of a store that will sell trousers but not neck-ties; of the grocer that will sell bread but not olives, forgetting that it is the little things of life that make for comfort. We trust that the wives of a good many other medical authors will make possible such excursions in various fields which the profession has plowed and planted but has not adequately fertilized, watered and kept free from weeds.

STOMATOLOGY IN GENERAL PRACTICE.—*Dr. H. P. Pickerill*, University of Otago, published by the Oxford University Press, 267 pages. Price \$5.50.

While this work is on the border-line of dentistry, it has much of interest for the medical practitioner, apart from the inclusion of prophylactic methods. It deals with various conditions of the mouth, bones, etc., in addition to the teeth. We venture to disagree somewhat with the advice against the routine use of thread to remove debris from between the teeth. The discussion of salivary chemistry, though brief, is unusually good.

AUGUSTUS CHARLES BERNAYS, A Memoir, by *Thekla Bernays*. Published by the C. V. Mosby Co., St. Louis, 306 pages with portrait frontispiece, \$2.00.

This is a very personal biography, by the distinguished surgeon's sister. If any criticism is possible it is that the biographer

naturally could not deal technically with the professional and scientific side of his life and that, in her endeavor to present a frank picture of his life and nature, she rather emphasizes the faults for which he was loved, and the recreations—by no means reprehensible—which gave him strength for his real life work. Considered merely as a story, without regard to the interest in Dr. Bernays' accomplishments, it is fascinating reading.

ESSAYS ON GENITO-URINARY SUBJECTS, by Dr. J. Bayard Clark of New York, Wm. Wood & Co., New York, 174 pages, \$1.25.

Several of the chapters are reprinted from periodicals. The tables showing the germicidal effects of various urethral and other antiseptics may be selected as the especially valuable part of the book. No pretense is made at covering the subject of genito-urinary disease in a systematic way, the chapters are hardly didactic but contain many useful side lights and are written in a most entertaining literary style.

SALVARSAN IN SYPHILIS AND ALLIED DISEASES (Supplement to A System of Syphilis), J. E. R. McDonagh, F. R. C. S., London, The Oxford University Press, 152 pages, \$3.00.

This epitomizes the literature on Salvarsan, to date, though by no means in the style of a review. The chemistry, practical value, relative safety, methods of administration, relations to the Wassermann reaction and other important points are thoroughly covered.

INFANT MORTALITY AND MILK STATIONS.—Special Report of the New York Milk Committee, 1912. 176 pages, paper covers, illustrated, \$1.00.

While this report is edited by Dr. Philip Van Ingen and Mr. Paul Emmons Taylor, due credit should be given to a number of workers too numerous to mention, as well as the philanthropists behind the movement. A chart which, at a glance, resembles a genealogic record, indicates the organization of the charity. While the report covers similar work in the ten largest cities of the U. S., thus just admitting Buffalo, it deals mainly with the work in the Metropolis. Probably there is no other city in the civilized world presenting, on the one hand, a problem of infant mortality so terrible, and, on the other hand, so well adapted by concentration of population and its alien nature, to the work of relief which, in turn, can command more capital and labor, than in any other center. It would, however, be more accurate to say that there is no other city in the civilized world in which the problem and the class willing and able to attack it are more sharply separated.

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ORIGINAL ARTICLES

Immunity

With Reference to Some of Its Relations to Surgery

Being the Harrington Lectures before the Alumni Association of the University of Buffalo, May 29 and 30, 1912.

By LUDWIG HEKTOEN, M. D.

Director of the Memorial Institute for Infectious Diseases
Chicago

I.

IN speaking of immunity we have in mind primarily the general conditions and processes of the body that enable it to resist infection more or less completely. The study of immunity includes the study of the mechanisms whereby the body protects itself from infection and recovers from infection. As an outcome of such study we have learned to employ some of these natural means with success and we are constantly striving to extend the use of natural means for the purposes indicated and if possible to improve on them; the study of immunity, that is, of the complex responses of the body to infection, has resulted also in giving us new and valuable means of diagnosis.

The underlying principles of immunity are of course the same no matter what the particular point of view from which its manifold phenomena or its practical application may be considered. On this occasion it is my purpose, first, to outline briefly some of the fundamental facts in regard to immunity and, secondly, to illustrate their bearing on treatment and diagnosis by reference to conditions that are perhaps of special interest to the surgeon.

The history of the new science of immunology is a most interesting one; it is especially instructive to trace the early fore-shadowings of the great discoveries in this field in recent times, but the time at our disposal does not permit me to recount in a leisurely manner the various steps in the development of our knowledge of immunity from the remote period when Eastern people first practiced inoculation of small-pox to the present day with its serum therapy, its protective and curative inoculations, and its diagnostic serum reactions.

ANTIGENS AND ANTIBODIES.

Preventive and curative inoculation, serum diagnosis, and serum treatment are all based on the wonderful power of the animal body under suitable circumstances to produce substances that neutralize toxic microbic products, destroy the microbes, and break up foreign protein substances. The specific substances, which are concerned in these actions and which manifest themselves in various ways, are now commonly called antibodies, and in the language of the immunologist, any substance that can incite the formation of antibodies is an antigen. It has been found that antigens are protein substances, and that practically any protein that is foreign to an animal will exercise antigenic effects if it is introduced into its blood or tissues. Such proteins may be of vegetable, of bacterial or of animal origin. The red corpuscles and other cells, and the serum as well as other protein-containing substances of animals, all constitute or contain antigens and on that account are used extensively in the investigation of immunological problems; but from the point of view of the practitioner and the patient the most important antigenic substances are furnished by the microbes and the microbic products that are concerned in infectious processes.

THE ACTIONS OF ANTIBODIES: ANTITOXIC IMMUNITY.

Let us now consider briefly some of the chief facts about antibodies, their modes of action, and the laws governing their formation.

The first antibody with which we were made familiar is diphtheria antitoxin which was discovered by Behring in 1890. This great discovery was made possible by the discovery shortly before, by Roux and Yersin, that the diphtheria bacillus secretes a toxin which causes the essential disturbances of diphtheria infection. Behring found that certain animals respond to the injection of increasing quantities of toxin by the production of a specific antitoxin in far greater amounts than necessary for their own protection, and furthermore, that the serum of animals immunized in this way, when injected into other animals, may protect them from the corresponding toxin and even cure such as are suffering from the effects of the toxin. This led to the establishment of protective and curative serum therapy, which is based on the power of antitoxin to neutralize the corresponding toxin.

It was now hoped that specific antitoxins could be obtained for all infectious diseases by repeating in each case the scheme I have outlined, but this expectation met with disappointment because only few microbes produce diseases by the secretion of

typical toxins, and to this day we have only two potent antitoxic serums for human diseases, namely, antidiphtheria serum and antitetanus serum. It is true, however, that many other toxins have been found besides diphtheria and tetanus toxins, and that both in animals and plants. The immunity which is dependent on the neutralization of toxins by specific antitoxins is called *antitoxic immunity* to distinguish it from other forms in which the mechanism is different and in which it concerns other antibodies than antitoxins.

It is not necessary at this time to speak of the immeasurable benefits of antidiphtheria serum, but a few words may be in order in regard to the use of antitetanus serum, which is of special interest to the surgeon, especially as a preventive of tetanus.

The evidence in favor of the prophylactic value of antitetanic serum is substantial and convincing. I would point first to the success of veterinarians in preventing by means of serum the development of tetanus in horses which are very susceptible to this infection through wounds of various kinds. This practice originated with Nocard. In a district in Paris in which tetanus was prevalent and caused great loss, he stopped its occurrence practically completely by the early use of the serum. In the next place the preventive effectiveness of the serum in the case of human beings would seem to be illustrated in a striking manner by the tetanus epidemic in the maternity wards in Prague. Tetanus developed in the lying-in in spite of everything that could be done until von Rosthorn began to inject antitetanic serum when no further cases developed. Finally it is most significant that when tetanus serum is used as a routine measure in the treatment of wounds contaminated with dirt and other foreign substances, the number of cases of tetanus diminishes noticeably. This is the case among soldiers, both in war and peace, and in large, general surgical clinics. In a group of Paris hospitals there developed eleven cases in seven years and all these cases occurred in persons that by some mischance failed to receive the customary injection of antitetanus serum which is given by routine in all street accidents. According to the reports secured by the Journal of the American Medical Association, the injection of 1500 units of antitoxin in Fourth of July injuries together with thorough opening and cleansing of the wound is proving very generally successful in preventing tetanus. On the basis of the accumulated experience, Kocher would hold **any** surgeon blamable who does not inject tetanus antitoxin as **early** as possible in all cases of wounds contaminated with **street-dirt**. During the last five years there occurred, according to the statistics of the coroner's office, in Chicago, 157 deaths from tetanus

in persons wounded in various ways but exclusive of railroad accidents of all kinds; by far the larger number developed in cases of contused and lacerated wounds and of nail punctures of the feet; more cases occur in the summer months than at other times of the year. It is altogether proper to venture the statement that many of these deaths were preventable because tetanus antitoxin is not used regularly. For preventive purposes at least 1500 units of antitoxin should be injected subcutaneously, and repeated in eight days. In infected wounds it is especially desirable that the injections should be repeated. Dusting the wound with dried antitetanus serum is also recommended. While the curative results obtained from antitetanus serum are not so satisfactory as the preventive, to neglect its use would be wholly unwarranted as more cases recover with than without serum. Large doses injected intravenously would seem to offer the best results.

ANTI-INFECTIOUS IMMUNITY.

I indicated that in the course of the investigation set on foot by Behring's discovery, it was found that most pathogenic germs do not secrete poisonous substances with antigenic powers, that is, true toxins, as is the case with the bacilli of diphtheria and of tetanus. It was learned, however, from the work of Pfeiffer and others that on injection of certain germs, notably those of typhoid fever and cholera, which appear to cause toxic effects as they are broken up, animals produce bodies that attack the germs themselves and in conjunction with the complement of the blood cause their disintegration or lysis. These bodies are called lysins, lytic amboceptors, or immune bodies; they have specific affinities for the antigens that incite their formation and their function in lysis is to unite the complement with the cell, being in themselves without direct destructive power. Here then we have an antibody which is different from antitoxin in its structure and in its mode of action, and bodies of this kind are produced not only by the injection of bacterial cells but also of animal cells, especially red corpuscles, which have served as a very useful means of investigation into the nature of the immune bodies or amboceptors, and of complement. Amboceptors are quite stable bodies whereas complement, which is not increased by immunization, that is is not produced anew as antibodies are, is a sensitive substance, destroyed by heat at 56° C. for 30 minutes, and endowed with digestive properties which it can exercise, however, only after it is joined to the cell or substance attacked by means of a specific amboceptor. As I shall point out shortly, the phenomena of complement deviation or fixation as well as of allergy or anaphylaxis also depend on amboceptor-complement

action, and the full opsonic action of blood serum seems to be owing to a similar mechanism.

Metchnikoff established the general occurrence of phagocytosis in health and disease; Denys and others showed that the fluids of the body are necessary for phagocytosis as they make bacteria susceptible to phagocytic action; and we now know that this property of the body fluids is due to definite substances of the nature of antibodies, and called opsonins by Wright, which attach themselves to microbes and other cells and so alter them that they are taken up by the phagocytes. In some cases it is easy to demonstrate by laboratory methods that bacteria so ingested, e. g. streptococci, pneumococci, anthrax bacilli, are destroyed within the phagocytes whereas they grow freely in suspensions of phagocytes without the presence of opsonin, and in opsonic serum alone. The recent investigations of the opsonins have served to establish more clearly and firmly the great importance of phagocytosis in many infections notably with streptococci, pneumococci, tubercle bacilli, and other bacteria that are not destroyed readily by lysis, and that even in the case of bacteria subject to lysis phagocytosis plays a larger role than first believed. At first opsonins were regarded as simple bodies, but it was soon found that here also it involved two substances, one easily destroyed by heat and not increased by means of antigens, the other relatively resistant to heat, provided with specific affinities, and produced anew in immunization. The heat-resistant opsonic elements are capable of opsonic action by themselves and unite firmly with the objects acted on, but the opsonic effect is increased very much by means of the thermolabile, complement-like element. Whether opsonification is caused by distinct, independent substances or by antibodies with other actions as well, such as lysins, has been discussed a good deal, but we cannot stop to consider this question now.

On injection or introduction, as in natural infection, of certain bacteria, like typhoid and allied bacilli, gonococci, maningococci, and others, the lytic as well as the opsonic powers of the blood and other fluids are increased in a specific manner by the new production of antibodies; in other cases, as with streptococci and pneumococci, it is the opsonins that are increased so far as we can tell now. Because the actions of the lysins and opsonins are directed against microbes themselves rather than against their secretory products, the immunity in the infections in which the new production of these antibodies is an outstanding feature is designated as *anti-infectious* or *antibacterial* to distinguish it from the antitoxic. Unfortunately the immune serums of the anti-infectious type have not proved to be uniformly potent in

curative and protective action. The most successful is the anti-meningitis serum which appears to destroy meningococci directly as well as to cause increased phagocytosis and endophagocytic destruction and to destroy poisonous substances. Antigonococcus serum seems to act in a similar manner whereas antistreptococcus serum is more exclusively opsonic in its effects. Good effects have been obtained from the use of antigenococcus serum in various subacute and chronic localizations of the gonococcus and it seems not unlikely that even better results and prompter might be achievable if the serum were concentrated and injected in large quantities. The intraspinal injection of antimeningitis serum represents an ideal way of introducing antibodies because it brings them at once in contact with the substances we wish to destroy and neutralize.

And now a brief reference to antistreptococcus serum may be ventured. The chief antibody in this serum is opsonin. Soon after it is drawn, the serum, which is obtained from horses properly injected with streptococci, loses the larger part of its opsonic power as determined outside the body. This loss, however, is due to the disappearance of the heat-sensitive thermolabile, complement-like opsonic element, and fortunately the full power is restored by means of fresh serum of various kinds, including human blood from normal individuals as well as from patients with streptococcus infections. Antistreptococcus serum protects guinea-pigs against virulent streptococci just so long as it is reactivable in this way. It seems then that the potency of antistreptococcus serum depends in large measure on the presence of stable opsonic antibodies which there is good reason to believe are activated in the body. In animals (guinea-pigs, rabbits) as well as in human beings there is an increase of opsonin for streptococci in the blood after injection of anti-streptococcus serum, the amount of increase depending of course on the strength of the serum and on the quantity introduced as well as to some degree on the place of injection, which furthermore greatly influences the time when the relative maximum concentration is established. As in the case of the other antibodies absorption is slowest after subcutaneous injection and the relative concentration in the blood the lowest; on intramuscular injection the absorption is more rapid and the concentration higher; while on intravascular injection the maximum concentration is established at once and apparently with the least loss of opsonin. An as yet unexplained but apparently constant result of injections of antistreptococcus serum of much interest is increase in the phagocytic power of the leukocytes of the blood. There consequently is no question but that antistreptococcus serum has

protective and curative powers in proportion, we may assume, roughly speaking, to its opsonic content. In severe cases of erysipelas and of septic fever, Weaver and Tunncliffe of the Memorial Institute find intramuscular injections of good serum, 50 cc. at a time, are followed by rapid clinical improvement coincident with a marked increase in the streptococcus opsonins in the blood and in the phagocytic powers of the leukocytes. In view of these results, it becomes highly desirable that the value of antistreptococcus serum in other severe streptococcus infections, and especially those of puerperal origin, should be studied carefully, and if possible by the statist method.

In view of the fact that we lack standards of strength for antistreptococcus serum, the dosage must be arbitrary, and as the serums on the market vary, uniform results can not be expected. Experience teaches that large doses should be used, and if necessary repeated at frequent intervals. Estimations of the opsonic index may prove of value as a guide to the amount and the time of the reinjections as the aim should be to keep the opsonin content of the blood well above normal. In order to secure rapid absorption, intramuscular injections would be preferable to subcutaneous and in very urgent cases intravenous injection should be considered because it secures the maximum concentration of antibodies in the blood at once. In localized streptococcus infections, as in joints, serous cavities, and soft tissues, the serum might be injected with advantage directly into and about the seat of infection.*

Finally I would emphasize that good antistreptococcus serum undoubtedly may be of value as a preventive of streptococcus infection in neglected and complicated obstetrical cases, and when this infection is feared as a consequence of certain surgical operations.

AGGLUTINATION; PRECIPITATION, COMPLEMENT-FIXATION.

At this point mention may be made of certain reactions of immunity which are regarded as of minor importance in overcoming infection and intoxication yet as dependent at least in large part on distinct antibodies, which follow the same general laws as the antibodies already discussed, and which constitute diagnostic means of great importance. I refer to agglutination, precipitation, and complement fixation. While studying lysis of typhoid bacilli, Gruber and Durham recognized the occurrence of

*It is possible to concentrate the opsonin in antistreptococcus serum by the same methods as are used to concentrate antidiphtheric serum; this may prove to be of practical value in so far as it would reduce the quantity injected; it is possible that on subcutaneous and intramuscular injection the absorption of the opsonin in concentrated serum may be delayed by the relative increase of the protein content.

specific agglutination which almost immediately was applied to the diagnosis of typhoid fever and soon became established as a valuable diagnostic method which now is used everywhere. Agglutinins with different affinities are present in small quantities normally in the blood of man and animals and new production of specific agglutinins occurs with readiness on the introduction of bacteria and other antigenic substances notably red corpuscles. Much use is made of agglutination in solving questions of relationship of bacteria among themselves as well as to infectious processes.

There is a large number of protein substances of bacterial, vegetable, and animal origin which induce the formation of so-called precipitins, the action of which manifests itself in a precipitate when the serum of the injected animal is mixed under proper conditions with a clear solution of the protein injected or some closely related protein. This reaction is of great practical value in forensic blood diagnosis and in the detection of adulteration of meat food products, but at present it is not used as a routine procedure in clinical diagnosis. It is interesting to note that recently Ascoli has developed a precipitin-test for anthrax which is of great value from a veterinary point of view. Extracts of infected organs, especially the spleen, as well as of the bacilli themselves, give an immediate precipitate on coming in contact with anti-anthrax serum, and the active substance in such extracts is very resistant to destructive influences including boiling and decomposition.

The reaction known as complement fixation depends on the fact, first demonstrated by Bordet and Gengou, that when antigen and antibody unite they bind complement. Hence, when fluids containing antigen, the corresponding antibody, and free complement are mixed under proper conditions, the complement soon disappears so that no laking occurs when red corpuscles and the proper lytic amboceptor are added to the mixture. By this method it becomes possible to test as to antigen or antibody as the absence of either leaves the complement free so that laking results. As you know, Wassermann's reaction for syphilis, one of the most important and interesting methods of diagnosis, rests on the assumption that it is possible by typic fixation to demonstrate the absence or presence of specific anti-syphilitic bodies in the serum and cerebrospinal fluid. The method has proved useful also in other diseases and in the study of antibodies in certain therapeutic serums. Even very small quantities of glanders antibodies are detected by this test and its routine use in equine glanders is strongly urged by Mohler and others; undoubtedly the method will prove useful in the diagnosis of human glanders also.

Excepting allergy, which I shall discuss later, we have now considered the principal ways in which the actions of antibodies may manifest themselves, and before proceeding further in this direction it will be well to call to mind the chief facts that are known concerning the formation of antibodies in disease and under experimental conditions.

Some Considerations on the Early Diagnosis and Treatment of Mammary Cancer

By CHARLES W. BONNEY, A. B., M. D.
Philadelphia.

AMONG the multifarious duties devolving upon the overworked general practitioner of medicine it is doubtful if there be one which entails greater responsibility than the recognition of malignant disease in its incipient stage. Insidious in its onset, slow in its development, and frequently long unproductive of troublesome, not so say alarming symptoms, carcinoma pursues its fell course unremittingly, unrelentingly, and all too often disastrously, before the unfortunate victim of its ravages comes to realize that within his body there is harbored an invading host which must eventually prove destructive to all vital processes, unless perchance it be not so solidly intrenched as to defy and render impotent every effort to dislodge it and rout it even unto the remotest vestige.

That the site which this, our most dreaded foe, chooses to select for its base of operations naturally influences its resistance to the onslaught of the surgeon, is well known to all who have had to deal with it in its various localizations. Thus it is that while the discovery of an internal cancer oftentimes immediately banishes hope from our minds, the detection of a similar external neoplasm may leave us not without some expectation of good for the patient's future.

Of all forms of carcinoma except the superficial epithelioma, and the primary laryngeal form, the mammary is probably the most amenable to radical surgery, and it is for this reason that I have decided, in response to your invitation, to call to your attention certain considerations concerning its early diagnosis and modern treatment. So far as improvements in methods of operating are concerned, little if anything is to be expected, for the reason that the most approved methods now in vogue fulfill all requirements to a very high degree. In fact I believe that the operation I shall presently outline represents the acme of technical perfection. It is rather from increased diagnostic skill on the part of the family doctor that the surgeon will hope to obtain better results.

*Read before the McKean County Medical Society at Bradford, Pa., June 10, 1912

A large percentage of women affected with mammary cancer first consult the doctor because they have accidentally discovered that there is a lump in one breast, and as it often has produced no annoyance they may have deferred their visit for some time after they first became aware of its presence. It is exactly in such early cases as these, gentlemen, cases which almost every doctor sees occasionally, just as he now and then sees cases of locomotor ataxia, diabetic gangrene and osteomyelitis for instance, that much can be done by prompt recognition of the nature of the tissue changes and sound advice as to the best method of dealing with them.

In these early cases how is malignancy to be recognized? In the first place there is one most important point upon which too much stress cannot be placed, namely, that at least eighty per cent. and probably more of all mammary tumors are cancers. This percentage was the one which obtained in five thousand cases of neoplasms of the breast which I had occasion to collect and analyze for Dr. Rodman a few years ago. More recent statistics show even a higher percentage, and it is not improbable that eighty-five out of every hundred are cancers. This is truly a point which I cannot too forcibly impress upon you. Such being the case, would it not be more sensible to assume that a suspicious swelling, particularly in a woman past forty-five, is malignant and give her the benefit of a skilled opinion at once rather than to advise her to wait and see what will happen? Fortunately the signs of malignancy are sufficiently well pronounced in the majority of cases to make mere assumption of its existence unnecessary, and moreover in those doubtful cases in which physical examination proves insufficient, the microscope will render valuable assistance.

The characteristics of the swelling itself, its relation to the substance of the breast, to the skin and to the thoracic wall must all be carefully investigated. If it be hard and firm in consistency, irregular in outline, diffuse instead of distinctly localized, fixed within the substance of the gland so that it is impossible to move the one without moving the other, then in all probability it is malignant. If in addition to these characteristics there be unnatural fixation of the subcutaneous tissues, fastening the skin over the indurated area and giving it a slightly thickened, roughened appearance, which a French surgeon has not inaptly compared to orange peel, evidence almost pathogomonic of malignancy is present. In examining a patient for this sign try to pick up the skin over the swelling; if adherent it cannot be raised. Also try to make the skin slip over the mass and try

to move the mass under the skin; if adherent these manipulations will likewise be impossible. At a later stage in the evolution of the disease the breast becomes partly fixed to the pectoral fascia and after the latter has become invaded to the thoracic wall itself. To determine whether its mobility is reduced, place the flat of the hand upon the breast and try to move it in both directions laterally; then try the same manoeuvre with the patient's arm abducted, also try to move the gland up and down and lastly while her arm is in the same position steady her elbow with the other hand and have her try to bring her arm to her side. These manipulations will enable the examiner to detect beginning fixation and consequent diminished movability. Of course in later stages of the disease fixation is so apparent that the latter manipulations are not necessary, the breast being plastered, so to speak, to the underlying structures.

Retraction of the nipple, while an important sign if present, will be found only in those cases in which the tumor lies underneath the areola. If the growth begins in this situation or close to it, naturally the sign will manifest itself earlier than if it begins in another area of the gland. The most usual site is the upper outer quadrant, and as the neoplasm increases in size and extends downwards it not infrequently exerts sufficient traction upon the trabeculae to draw the nipple slightly upwards and place it upon a higher level than the one on the opposite side. This sign, which should always be looked for in the early cases, precedes retraction of the nipple. About a year ago, Dr. Parker Syms, of New York, in discussing a paper on breast cancer called attention to this sign and stated that he had never seen it mentioned in print. It was, however, mentioned by Dr. Schwartz, of Paris, in a short article published in December, 1910, and there can be no doubt that many careful observers have noticed it in years past.

With reference to enlargement of the axillary lymph nodes, it may be stated that they are not sufficiently diseased in the early cases to be felt upon palpation through the skin and axillary fascia. If they can be distinctly palpated, then it is safe to conclude that the malady is already far advanced and that the patient's chances of long freedom from recurrence are slight. True it is that they are almost invariably found to be larger than normal at operation, although they are not big enough to be distinctly felt through the axillary tissues. Microscopic examination of a node apparently normal sometimes shows it to be already infiltrated with carcinoma. Thus it is seen that the absence of palpable nodes in no wise points to the benignity of an indurated mammary enlargement.

Pain is a matter of no consequence in beginning mammary carcinoma, although unfortunately the laity believe it to be an invariable accompaniment of all forms of malignant disease. Would that it were! As a matter of fact it is pretty safe to say that an indurated area in the breast which is painful is not malignant.

While the preponderance of cases occur in women past middle life, this fact must not make us forget that younger women are also subject to the disease. In five thousand cases which I collected and analyzed with reference to age incidence, twelve per cent. were in women between thirty and forty and nine per cent. in women between twenty and thirty. Just because a woman is young it must not be concluded that a tumor in her breast is benign. At a recent meeting of the New York Surgical Society, Dr. Ellsworth Eliot, Jr., asked the members to state their experience in this matter. Of those present there were five who had cases in women between the ages of twenty-one and twenty-eight. One gentleman said that Dr. Brewer had had a case in a child of eleven. That of course is unique.

Why speak of edema of the entire breast, of ulceration, of swelling of the arm, of enlarged supraclavicular lymph nodes, of cachexia, emaciation and the other signs of advanced malignancy? They are seen all too often and their significance is but too well known. They show that delay, dillydallying and procrastination have allowed the most opportune time for intervention to pass by; surely they spell the doom of the patient. Whose fault is it? The patient's? Yes, often times. The doctor's? In a certain percentage of cases, alas, the answer must be affirmative. The report of the Cancer Commission shows that cancer patients are held on an average for thirteen months before they are turned over to the surgeon. I for one, however, have too high an opinion of the great body of doctors at large ever to believe that they alone are culpable. Sometimes it is the fashionable consultant, the hospital physician, or even the professor of internal medicine who, when his opinion is sought by colleague and patient, doles out the advice, "Let us wait and see what will happen"—in other words, he means let us wait and see if the patient's breast will become fastened to her thoracic wall, if a mass will form in her axilla, if she will become pale and emaciated, develop internal metastases and die despite a possible belated effort to save her. Gentlemen, the hope of the future lies in better co-operation between patient, doctor and surgeon. Impress upon the patients the seriousness of their condition, get them to consent to operative treatment at once, and the results will be more and more satis-

factory as time goes by. The progressive surgeons look to the general practitioners for help.

A few words about differential diagnosis. The condition with which early carcinoma is most likely to be confounded is chronic cystic mastitis, or abnormal involution, as it is now more frequently called. The nodules characterizing this condition are hard, irregular and intimately connected with the substance of the gland, yet their contour can be outlined. They are often painful and are sometimes tender under pressure. Occasionally they may develop simultaneously in different parts of the breast. Sometimes this condition is the sequel of acute inflammatory troubles, in which case its nature will be more easily recognized than when it develops irrespective of such precursors. Very often there is discharge from the nipple, or fluid can be squeezed out when the latter is pressed upon. In the more advanced cases it may be possible to detect small collections of fluid in the substance of the hardened areas. It is in this condition that microscopic diagnosis renders us the greatest service. The condition is distinctly a surgical one for the reason that it may become malignant. Greenough and Hartwell found carcinomatous degeneration in ten per cent. of the cases they examined. Others have found it in a higher percentage. Microscopic examination of a frozen section made by a skilled pathologist while the surgeon is operating will enable the latter to decide whether simple amputation of the breast will suffice or whether he need proceed with the complete and radical operation. Of course such an examination must not be intrusted to a mere tyro in laboratory methods. Even in the hands of the most expert it cannot be so thorough as the routine examination of many sections of fixed tissue, but still it is of sufficient certainty to be of great help. I am informed that this method has been used at the Mayo clinic with the most satisfactory results.

Diffuse syphilitic infiltration of the breast may also be mistaken for cancer, and no doubt breasts thus diseased have been removed under mistaken diagnosis. Fortunately it usually occurs during the late secondary period of infection, at a time when other manifestations are present. Were it not for this circumstance diagnosis would be even more difficult. Gummata resemble benign rather than malignant tumors and should not be mistaken for the latter. Still the mistake has been made.

The distinctive feature about tuberculosis is early involvement of the axillary glands, which are prone to break down before softening of the diseased areas in the breast takes place. In the discrete form of the disease, too, multiple areas of induration

are present, a circumstance which precludes the possibility of the trouble being carcinomatous.

Finally, it must be borne in mind that there are some cases so obscure as to make clinical diagnosis impossible in the early stages. According to good authority the manifestations are so ill-defined in about ten per cent. of all cases that recourse must be had to the microscope to learn the exact nature of the trouble. That carcinomatous cysts, together with abnormal involution, constitute the bulk of such cases is not to be doubted.

Now as to treatment. It would be interesting to trace the evolution of the more complete operations, to show how they were improved step by step, and especially to point out how the percentages of cures increased *pari passu* with amplification of the operations; also to narrate the epoch-making work of Meyer and Halsted, and pay tribute again to the ingenuity of Warren. Time, however, does not permit these things, so a brief description of the procedure referred to in the beginning of this paper must suffice. During the years 1906 and 1907 it was my good fortune to be associated in the investigation of this subject with Professor William L. Rodman, who, beginning his work more than thirty years ago under the guidance of the late illustrious S. W. Gross, the pioneer in rational breast surgery in this country, received an inspiration which has never waned, and which, if I mistake not, has finally resulted in the perfection of an operative technique that leaves little to be desired from the standpoints of anatomy, pathology and surgery. It is the product of profound thought and hard labor. It was worked out on the cadaver before it was practised upon the living, and it is now done a little differently from the way it was first performed.

The first incision starts about an inch below the clavicle and two fingers' breadth internal to the sulcus between the deltoid and the great pectoral muscles and is carried down well onto the margin of the anterior axillary fold. It divides all the superficial tissues and exposes the anterior surface of the pectoralis major. The index finger of the left hand is carried beneath the muscle and made to push its way out between the clavicular and thoracic portions, after which the muscle is divided close to its insertion. Thus the clavicular portion is left, you will see. The dissection is then continued deeper and the pectoralis minor is shortly exposed, being in turn divided close to its insertion into the coracoid process. I may say now that the man who can make a perfect dissection of the axilla with the pectoralis minor in situ has yet to be born. It cannot be well done on the cadaver, much less on the living. The costocoracoid membrane, which fills in the space between the subclavius and the pectoralis minor, lies over the

apex of the axilla and it, too, should be divided, whereupon the whole space from apex to base will be laid wide open. It is then cleaned of its contents,—fat, fascia and glands—the dissection being begun above and carried downwards. A piece of gauze wound around the finger forms the best instrument for this dissection, after the fascia has once been divided with a sharp knife external to the axillary vessels and brachial plexus. The branches of the axillary artery and their accompanying veins are secured and divided as they are brought into view. The axillary dissection completed, another incision, elliptical in outline, is begun at the middle of the first one and is carried around the breast from before backwards going right down through both pectorals to the serratus magnus. The lower part of this cut is extended down onto the abdomen, so that the anterior layer of the sheath of the rectus may be divided transversely. I carry it even lower down than does Rodman himself and excise a piece of the fascia. This division or removal of the deep fascia is made to destroy the integrity of the subfascial lymphatic plexus through which, according to Mr. Handley, of London, direct extension of carcinoma takes place. Accepting Mr. Handley's views on this matter, I sometimes remove the lower part of the serratus magnus itself in addition to a piece of the fascia. In the second incision the skin is widely undermined. The wound made by these two incisions is very extensive, and anyone seeing it for the first time is bound to think that there will be difficulty in closing it. As a matter of fact such is not the case. The straight cut is closed first, then the elliptical one. I have done a secondary operation on a patient primarily operated upon in a late stage of her disease and still closed the wound. It was necessary, however, to make the relaxation incisions of Warren.

The advantages of this operation may be summarized as follows: it attacks the axilla first, thus making possible the removal of diseased tissue from without inwards; it exposes the axilla better than any other method; it does not encroach upon the arm and consequently does not leave a scar which interferes with the natural movements of that limb; it lessens hemorrhage by permitting ligation of the axillary vessels close to their origin during the early stages of the operation; it saves times; it permits extensive removal of tissue without necessitating skin grafting. These are points in which it excels.

I will here take occasion to state that the first or straight incision used in this operation affords the best route of attack upon axillary tumors. I have used it twice for this purpose and once for the removal of a malignant growth of the pectoral muscle invading the axilla. I believe I was the first one to employ it for

this purpose, and as it has proved so eminently satisfactory, I desire to call attention to it.

Of course no one can say when a cancer patient is cured. The three year limit is entirely too short, and likewise the disease may return long after five years. A patient who remains well for three years, however, has good expectations for the future. The possibility of local or internal recurrence in all cases, even those operated upon early, must be recognized. Neoplasms which have grown rapidly are more likely to return than those which have developed slowly. At all events the best results are to be expected when the patient is operated upon early in the course of the disease. Give us patients with movable breasts and we will give you a greater number of cures.

1117 Spruce Street.

Two Interesting Results from the Use of Pituitary Extract.

By W. G. DOERN, M.D.

Formerly Professor of Anatomy and Principles of Surgery, Milwaukee Medical College.
Attending Surgeon St. Joseph's Hospital.
Milwaukee, Wis.

WE now find animal therapy more thoroughly established, than ever before, in present day treatment by the advanced medical men of the country. While many of the theories advanced as to the therapeutic value of some of these agents are yet problematical, many of them have been very thoroughly established by the vast preponderance of evidences in clinical results.

Although the future of this class of agents is promising, it will require no little time and mass of clinical reports to prove or disprove the many theories that have already been advanced.

One of the most recent subjects of investigation is the extract of the Pituitary body. This little organ snugly hidden away at the base of the brain has long been and still is an enigma to science. Some of our early research workers concluded that it had no purpose other than a cushion or protection for the brain. Modern science long since ceased to doubt that the Pituitary body was of vital importance to the functions of certain other of the human organs and it has been shown by experiments that there is a relationship between the thyroid gland and the Pituitary body and a possible relation to that of the suprarenal glands. Just what their relationship is becomes a matter of considerable speculation. The fact that the organ is situated so remote in the human anatomy far from any field of observation renders the possibility of human experiments almost impossible. Our knowledge is therefore based upon animal experimentation and such clinical observations as have been possible to make.

It has been my privilege to observe two very interesting cases, treated with an extract of the infundibular body which was prepared by the Department of Experimental Medicine of Parke, Davis & Co. My purpose in reporting these cases is to add just so much to the information which is so eagerly sought by those who are interested in the scientific advancement of modern medicine, with the hope of inviting a co-operation from other medical men who have had as much or perhaps more experiences with the Pituitary Extract.

Case No. 1—Miss G. Seamstress. Age 26. History; severe headaches continuing for weeks without relief. While the pain was general through the head, it was usually worse on the right side. At times there was noticeable swelling or puffing of the eye lids. The refraction was apparently normal, and there was no objective or subjective symptoms that would indicate the real cause of the condition. Anodyne and sedative treatment afforded temporary relief and that for only a short time. A general physical examination revealed nothing of a positive nature, except that the patient would pass about $1\frac{1}{2}$ pints of urine in 24 hours, specific gravity, 1.008. There was no evidence of inflammatory condition of the kidney other than a real insufficiency.

As an experiment, this patient was given 10 drops of Pituitary Extract 3 times a day and within 3 days the amount of urine was increased from $1\frac{1}{2}$ to $2\frac{1}{2}$ pints in 24 hours. With this came a noticeable improvement in the condition of the patient, with practically a complete relief from all headache and eye conditions.

Case No. 2—Mr. B. Age 52. Married. Occupation, Business Manager of a large manufacturing concern. History:—has always been strong and vigorous with no severe illness during his entire lifetime. For about 6 months previous to the present time, he had noticed a lack of potentia sexualis, otherwise apparently in perfect health. He was placed on a treatment of 15 drops of the Pituitary Extract 3 times a day with no other treatment. In a short time, there was a noticeable improvement in his condition and at the end of 3 weeks, the potential energies were restored to normal. This patient had reported several times during the past 3 months and each time has shown permanent benefit without a continuation of the treatment.

This medication suggested itself to me owing to the marked stimulating effect which the Pituitary substance has upon the sexual organs, as indicated by the lack of sexual development or loss of powers in cases of tumors of the Pituitary Body.

I trust that the report of these cases will stimulate other physicians to report similar cases should they by chance have had the opportunity to observe them.

415 Grand Ave.

Neosalvarsan.

By MAJ. W. W. QUINTON, M.D.,
Buffalo.

THROUGH the courtesy of Victor Kœchl & Co., New York City, I have received recent German literature relating to the new product of the Ehrlich laboratories—Neosalvarsan.

The dosage recommended by Schreiber and quoted in the August number of the JOURNAL, was regarded by Ehrlich as being too liberal and Schreiber now agrees that small doses are to be preferred. Ehrlich's views on dosage have the support of Wechselmann of Berlin, Marschalko of Klausenberg, Weintraub of Weisbaden and Duhot of Brussels.

The average single dose for Men is .6-.75 Gm. Women, .45-.6 Gm. For older children, .15-.3 Gm. For nurselings, .05 Gm.

Maximum single dose:— Men, .9 Gm. Women, .75 Gm.

The treatment should begin with small doses and combined mercurial treatment as in the case of Salvarsan is recommended.

In early syphilis showing signs of disturbance of the nervous system, a short preliminary treatment with mercury is advised after which treatment with Neosalvarsan may be instituted using small doses varying from .15-.3 Gm. A second injection of the same amount is given and later injection of .4, .6, .75 and as a maximum .9 Gm.

In early chancre of at most 14 days duration with negative Wassermann and slight involvement of the lymphatics, one may use to advantage a stronger initial dose.

In cerebral lues or meningitis the beginning dosage must be small.

Subcutaneous injection must be avoided under all circumstances. For intravenous injections .15 Gm. Neosalvarsan is dissolved in 25 ccm of freshly distilled water. For intra-muscular injection:—I Gm. of Neosalvarsan dissolved in 22 ccm of distilled water will give an isotonic solution. Therefore 3 ccm of distilled water should be used to dissolve .15 Gm. of Neosalvarsan. The injection is best made with a sterile 4% saline solution using chemically pure NaCl and freshly prepared water. It must be at room temperature (20-22°C) and must be injected immediately. Under no circumstances must the solution be warmed.

Three Years with the Army of the Potomac—A Personal Military History.

BY WILLIAM WARREN POTTER, M.D., BUFFALO, N. Y., BREVET LIEUTENANT COLONEL, U. S. VOLUNTEERS; SURGEON IN CHARGE OF FIRST DIVISION FIELD HOSPITAL SECOND ARMY CORPS; SURGEON 57TH REGIMENT NEW YORK VOLUNTEERS; ASSISTANT SURGEON 49TH REGIMENT NEW YORK VOLUNTEERS; RECORDER SECOND DIVISION HOSPITAL SIXTH ARMY CORPS, ETC., ETC.

June 20. We did not fight much yesterday, but this morning heavy cannonading on the right is heard, which probably means that the ball has again opened. We appear to be fighting it out on this line, and I think it very probable that the contest will continue here, even unto the bitter end. The enemy has certainly reached very nearly, if not quite, his last ditch. The weather is very hot, and there is plenty of work to do but very little energy to do it. General Barlow's brother is here and will take a letter from me to Washington, which will enable me to communicate with home.

June 22. Wednesday. Yesterday we moved the hospital about five miles towards the left, and are now about that distance from Petersburg. We crossed the R. R. leading to Suffolk, and are now located at the Smith House near the Jerusalem Plank Road. General Hancock's Headquarters are at the Jones House on the Plank Road; and Headquarters A. of P. are but a few hundred yards away. We are having no fighting today with the exception of a little cannonading on the right, where the Army of the James holds forth. I traded saddles with Captain Elliott while on the march yesterday, and now have a fine English saddle that I like very much better than the one I had before. We are nicely situated again, my tent being in a beautiful yard that surrounds a fine house, and we have plenty of good shade which is a consideration of importance. In an open, out-of-door life like this, the difference between good shade and none at all is simply immense. The house is comfortably furnished, and has such conveniences as we need. I have no idea where the family vanished to, but presume to join the friends of their inclining over in Petersburg. We use the dining-room for our mess, and some of the rooms for the sick officers. Colonel Frank, commanding Third Brigade, is now occupying the parlor, having lost his voice completely, being therefore unable to utter a word of command. Major Kirke died day before yesterday at City Point, and it was found necessary to amputate Captain Wright's foot, so it looks discouraging for him. Captain Middleton has

returned to duty, and is in command of the regiment, being the senior officer present. It seems odd to me that Middleton should be in command for when I joined the 57th, he was one of the younger Lieutenants.

June 25. The weather is very hot, and the roads are dusty; but we have a good supply of ice and plenty of lemons, which serve to make life tolerable. Major Hazard, chief of artillery Second Corps, was just here, and I gave him a glass of lemon punch to cool his parched lips. Captain Lewis Nolen and Captain Derrickson were both taken prisoners two days ago.

June 27. Monday. Major Ellis has just been to call upon me, having returned from his Spottsylvania wound. He called to see Mrs. Potter while away, and came to report that all was well at home. He has been appointed Inspector General of the First Division Sixth Corps, and is now on General Russell's staff. Dr. Houston, Dr. Plunkett and Lieutenant Frank Nolen are preparing to leave, as they will be mustered out on the 30th. Dr. Dougherty told me a few days ago that he would make me Surgeon-in-Chief of the Division if my time did not expire so soon; but I informed him that I did not desire the place, as I much preferred my present position. It is more independent, affords me more professional employment, and, withal, quite as much honor. Dr. Hall is not more than a quarter of a mile from here with his hospital, and I shall go over and see him this evening. "Brain" Butler was wounded on the 16th or 17th but I did not see him.

June 29. Wednesday. We are still at the Smith House and have had eight days of comparative quietude, which is the longest time we have been in one place since the campaign opened. As Lieutenant Nolen goes out of service tomorrow, I obtained the appointment of Lieutenant Mitchell, of the 57th, in his place as Chief of Ambulances for the Division. I called to see Dr. Hall yesterday, and found him the same as ever, genial and happy. I met Captain Elliot today at Corps Headquarters. Captain Britt has been mustered as Lieutenant Colonel of the 57th, and is back again for duty, though his knee is not yet sound. Lieutenant Hunt of the Artillery, whose foot George L. Potter and I operated on at the Totopotomoy, died in Washington a few days ago. Miss Hancock is at City Point, where large base hospitals have been established, caring for the wounded of the 1st Division.

Saturday, July 2. We are still at the Smith House, the weather is insufferably hot, and as we have had no rain to speak of for a month, the air is full of dust. I have moved my quarters into the house because the dust has become so intolerable. Dr.

Houston will be mustered out to-day, and Dr. Henry A. Martin, U. S. Volunteers, will take his place. Last evening the medical officers of the Division held a meeting here, to give expression to their regrets in thus separating from our old friend and chief. Appropriate resolutions were passed, and a sum of money raised to purchase a suitable testimonial of our regard. Colonel F. A. Walker is again with me, having come over yesterday to have two teeth extracted. He preferred to take chloroform, and has not yet recovered from its secondary effects. Major John Hancock is relieved from duty with the First Division and assigned to the Third, as he could not agree with General Barlow. Walker thinks we will remain here some time.

Monday, July 4. Everything is extremely quiet along the whole line this morning, but two or three guns having been heard, and they far off to the right. Yesterday Dr. Houston, Dr. Plunkett, and Lieutenant Nolen started for home, going off in fine spirits and great glee. I was very sorry to have them go; they were good and faithful officers, and warm friends of mine. Today is much cooler than common here, though we have had no rain worth mentioning, only a little shower last night. The hospital is in fine condition, containing 170 sick patients but, strange to tell, no wounded. The First Division Hospital has the reputation of being one of the best in the Army. Major Ellis called upon me two days ago and was, as usual, looking well.

July 6. Our position remains unchanged, and I hope will continue so for some time, as it is too hot to fight. Mrs. Barlow has been up to see the General, and I took her to City Point at the request of General Barlow, as he could not go with her himself. We went down in the old family carriage found in the barn on the Smith estate, and I saw her safely on board the steamer bound for Washington. She did not seem well but made no complaint at the time. Dr. Martin and Dr. George L. Potter are occupying quarters with me here at the Smith House, and they are both very agreeable companions. It appears that the rebels expected us to attack them on the Fourth of July, and were in readiness for us under arms all day. But we had no idea of making ourselves ridiculous by such nonsense as that on Independence Day. We passed the day very comfortably, while they were sweating with their belts on and their muskets in hand, the hot sun pouring its sweltering rays down upon them. The Third Division Sixth Corps moved somewhere today towards the right, and rumor has it that they go to Harper's Ferry. Captain Wilson came over to see me yesterday, and is looking well. Dr. George L. Potter and I are each sporting a straw hat, and today in rid-

ing out to the lines we met General Barlow coming back, who smilingly returned our salute, but never said a word in criticism of our unmilitary head apparel.

Friday, July 8. Colonel Britt is with me now, not having recovered from the injury to his knee received last March. He is applying for leave, and will remain here until it comes. Dr. Wilson, brother of Captain W. and late of the Fifth Corps, committed suicide in Harrisburg a few days ago by cutting his throat. He was a cousin of Dr. George L. Potter, and the news comes through the Philadelphia Inquirer, just received. The Doctor and the Captain are both very much saddened thereby, as they regarded Dr. Wilson with affection.

July 9. Saturday. I visited the 49th, and took supper with Colonel Bidwell and other officers this evening. Major Ellis called while I was there, and we went over to General Russell's Headquarters together. Ellis took me out into the woods to show me a carriage that he had "captured," and while we were looking at it orders came for the Sixth Corps to start for Maryland, to assist in driving out the rebels, who are reported there in force under Early. Ellis was in great glee over the prospect, and flew around to make preparations for the transfer of the troops to their new field; so I hastily bade him good-bye, but never saw him afterwards.

Monday, July 11. We are living in great style at present. Directly across the hall from my parlor is the dining room, where ten officers have their mess, and meet three times a day to enjoy the good things set before them. Dr. George L. Potter occupies one end of the table, and I the other. Our white tablecloth, white china, silver, etc., together with some glassware we have captured, make our table look very homelike and attractive. We have two little negro waiters in white aprons to serve the table, and the whole get-up would do credit to a Broadway restaurant. But it will not last long—such comforts never do, at least in the Army. Captain Wright died in Washington from the effects of his wound and the amputation, and his remains have been sent on to New York. The officers of the 57th have passed appropriate resolutions expressive of our appreciation of him as an officer and a man, and of our sympathy with his family, that have been sent forward to his sisters.

Wednesday, July 13. Night before last we vacated the Smith House, and found ourselves at daylight in the rear of the Fifth Corps Headquarters, where we proceeded to put up the hospital. Today our whole corps moved back also, and is massed in an open field near by, "in reserve." The siege of Petersburg goes bravely on, that is to say, we are pretty nearly as well off as we

were three weeks ago, saving the few hundred men we have lost. The Army is greatly delighted at receiving the news of the destruction of the rebel cruiser "Alabama" by the "Kearsarge," off the coast of France last month.

July 15. Friday. I took a ride this morning in company with Drs. Dougherty and George L. Potter, and Captain Pelton, down to the wagon camp about five miles distant, where we saw two men hung for an unmentionable crime. It was a very aggravated case, and of course the punishment was just. Today the weather is much cooler, and we are all delighted with the change. An order has been issued authorizing the employment of acting staff surgeons, from among those regimental surgeons of two or more years' experience and service, whose terms are now expiring. These medical officers are to have the same pay and allowances as regimental surgeons, and are to be allowed one Government horse in addition. This may serve to retain the services of a few who would go out of the field altogether, but I do not believe any considerable number will accept the offer; for they will really have no actual rank, and will simply be employed as any civil physician under contract.

July 18. Monday. We moved about one and a half miles on Saturday, and are now occupying the grounds of the Burchard Mansion on the Norfolk and Petersburg stage road, about a mile east or in rear of General Meade's Headquarters. The plantation is owned by Mr. Burchard, who is the father-in-law of the rebel General Dearing, of the cavalry service. It is well furnished, has a fine Chickering piano with Aeolian attachment, and Mrs. Burchard, with two daughters, attended by some old servants, are occupying the house. Mr. Burchard, himself, went to Petersburg to take Mrs. F. Dearing the day our forces came up, June 16, and our lines have cut off his return, (he did not reach home until the war was over, ten months afterwards.) Dr. Gesner, who went home on sick leave when we were at the Tyler House, has had forwarded to him an extension of his leave for twenty days more. Dr. Rizer, 72d Pa., has also been home for twenty days since the campaign opened. Surely, these be fortunate soldiers. Colonel Walker and Captain Pelton spent this evening with us, and seemed to enjoy their visit very much. Colonel Britt goes home tomorrow on twenty days' leave. A large number of recruits has been sent to the 57th, which may necessitate my remaining in the service longer than I had anticipated. My time will properly expire on September 16, but if the regiment is filled up to any considerable extent, it is probable that I shall stay a month or two longer. I sent money home early in the month and, as I have not yet heard from it, I am apprehen-

sive the rebels have captured it, in a raid they made on the R. R. in Maryland.

July 21. The air is delightfully pure this morning, as we had rain yesterday and the day before. I have heard from home today that the money I sent was received in safety. I have, until lately, been hoping to reach home by September 20, but it looks now as though I would not be able to go until a month later. The Government is beginning to appreciate the services of experienced medical officers, and will hold on to them as long as possible, the difficulty in replacing them being so very great.

Saturday, July 23. I paid a visit to City Point yesterday, and took a look at the hospitals there. They are not in better condition than mine, while their facilities for their preparation and maintenance are far superior. I saw Miss Hancock there and took dinner with her. We have a new thing in the way of concentrated food called condensed egg, the eggs being first dried and then put up in hermetically sealed cans, the same as milk. They are very nice indeed, serving the purpose in the preparation of puddings, custards, and many other dishes, nearly or quite as well as fresh eggs. It is thought a general bombardment of Petersburg with a hundred siege guns, will take place within the next few days.

July 24. We have received orders to move the hospital immediately, a part of the train to go to City Point. The weather is very hot, on that account, I dread the march very much indeed.

July 25. Last night we were refreshed with a delightful rain, which continued all night long. We did not move today as ordered yesterday, so I took a ride this afternoon, making the tour of the various headquarters—Brigade, Division and Corps,—and met Colonel Walker, Captain Favill, and many others of my friends. Captain F. tells me that his Company's time will expire on August 12, and that he will, therefore, be mustered out on that date. Captain Brownson, mustering officer at Corps Headquarters, informs me that I cannot be mustered out until October 18. Considerable heavy firing is heard all along the lines tonight from heavy mortars and rifled cannon, and it is expected a terrific bombardment will take place within a day or two.

The organization of the hospital is very complete now. I have one surgeon in charge of food and shelter, whose duty is to superintend putting up the tents, the preparation of the food, beds, etc.; one surgeon as executive officer, who promulgates the orders and attends to their execution; one assistant surgeon as Recorder, who attends to the registering of names, prepara-

tion of reports, and all office details; and three prescribing surgeons, who look after the treatment of the sick in the wards; and these, together with hospital stewards, wardmaster, clerk, nurses, cooks, etc.; constitute quite a staff and corps of assistants. The personnel of the staff is as follows:

Surgeon W. W. Potter, 57th N. Y., in charge of Hospital,

Surgeon C. S. Hoyt, 39th N. Y., Executive Officer.

Surgeon Jas. E. Pomfret, 7th N. Y. H. Art'y, Food and Shelter,

Assist.-Surgeon J. C. Norris, 81st Pa., Recorder,

Surgeon M. C. Rowland, 61st N. Y., Chief Prescriber,

Two Assistant-Surgeons to aid the latter.

Dr. George L. Potter has been Surgeon-in-Chief of the Artillery Brigade, and Major John G. Hazard is now Chief of Artillery of the 2d Corps. Dr. Rowland, who was my assistant all winter at Brandy Station, is back again to take charge of the prescribing department of the hospital, and I was glad to obtain the services of so competent and experienced an officer. For dinner today we had roast beef, nice boiled potatoes, fresh butter, good bread, and tomatoes, the latter obtained fresh from Norfolk. For dessert: lemon and cranberry pie, water melon, and ice-cream. Hours for meals: breakfast at eight o'clock; luncheon at twelve-thirty, and dinner at six.

SOCIETY PROCEEDINGS.

THE 14TH ANNUAL MEETING of the *American Hospital Association* will be held in the Hotel Ponchartrain, Detroit, Tues. to Friday, Sept. 24-27, 1912. Various phases of business management, philanthropy, nursing, etc., will be discussed. Dr. R. R. Ross of the Buffalo General Hospital will read on the Use of Salvarsan. The Secretary is J. N. E. Brown, M. B., 90 Charles St., East, Toronto, Ont.

Buffalo Academy of Medicine Officers 1912-13: President, Dr. W. Scott Renner; Treasurer Dr. Lawrence Hendee; Secretary, Dr. Harry R. Trick; Trustee for one year, Dr. Thos. F. Dwyer; Trustee for two years, Dr. John H. Pryor; Trustee for three years, Dr. James W. Putnam. Medical Section. Chairman, Dr. Carl S. Tompkins; Secretary, Dr. Herman K. DeGroat. Surgical Section. Chairman, Dr. Herbert A. Smith; Secretary, Dr. Chas. W. Bethune. Obstetrical and Gynecological Section. Chairman, Dr. Frank W. Ransom; Secretary, Dr. Descum E. McKenny. Pathological Section. Chairman, Dr. Guy L. McCutcheon; Sec-

retary Dr. A. A. Thibaudeau. Dr. Stephen Y. Howell, retiring president, ex-officio member of the Council.

In 1911-12, the Council held ten meetings with an average attendance of nine.

The Academy held four Stated Meetings as follows:

Oct. 3, 1911. Program by Surgical section, attendance	80
Dec. 19, 1911. Program by Obst. and Gyn. sec., attendance . .	65
Feb. 27, 1912. Program by Pathological sec., attendance	75
Mch. 12, 1912. Program by Medical section, attendance	75
Nov. 4, 1911. W. J. Mayo, attendance	254
May 21, 1912. Special Meeting, attendance	50
Number of Fellows in good standing June 1, 1911	359

New members received during the year, Resident, 10, Non-resident, 3, total, 13; Members lost during the year, by death, 2, by resignation, 0, Dropped for non-payment of dues, 30, Total, 32, net loss 19.

Number of members in good standing June 1, 1912 340

Respectfully submitted, HARRY R. TRICK, *Secretary*.

The first meeting of the season 1912-13 will be held at the Public Library Building, Tues. Oct. 1, at 8.30 P. M., under the direction of the Surgical Section. Program to be announced later.

The ELMIRA ACADEMY OF MEDICINE will hold its first meeting of the season on Sept. 4. Dr. R. P. Bush will read a paper on "The County Tuberculosis Sanatoria."

ABSTRACTS.

RABIES IN CALIFORNIA.—Dr. Wilbur A. Sawyer, Berkeley, Calif., *Calif. State Jour. of Med.*, Aug., 1912, reports 250 cases of rabies for the year ending Mch. 31, 1912. However, only 2 occurred in man; 240 in dogs; 3 each in cats and cows; 1 each in horse and squirrel.

IDIOSYNCRASY TO EGG ALBUMIN.—Dr. Wm. P. Coues of Prouts Neck, Me. *Boston M. & S. Jour.*, Aug. 8, 1912, alludes to a similar report and bibliography by Schloss in the *Am. Jour. of Diseases of Children*, June, 1912. His own case was that of a child 21 months old, given egg white for the first time. Nausea and vomiting followed. A month later, an egg white was given on each of three successive days. After the last feeding, the child began to sneeze, had marked coryza and a general erythema with cedema of eye-lids and penis. No respiratory embarrassment, no

fever, no marked prostration. Laxol internally and sodium bicarbonate externally gave relief promptly.

Salvarsan has given a negative result in a case of chronic leprosy. Gioseffi, *Gaz. degli Osp.*, Jan. 29, 1911. Experience of this sort is of special interest, since it may have occurred to many physicians to learn whether 606 has an antiseptic action in infectious processes of non-syphilitic origin. An amusing military case may be cited. The patient had obstinate amœbic dysentery. Becoming discouraged, he left the post hospital and consulted an up-to-date quack who diagnosed syphilis, injected 606 and cured the dysentery promptly.

Klemperer (*Deutsch. med. Woch.*, May 9th) gave salvarsan internally in an epidemic of scarlatina with a mortality of nearly 25 per cent. The mortality in the salvarsan series was about 8 per cent. In every case the injection was followed at once by a fall of temperature, a phenomenon never seen in any of the forms of sepsis, rheumatism, or tuberculosis.

ECTOPIC GESTATION SAC OPENING INTO RECTUM.—Brickner, *Am. Jour. of Obstet.*, Feb. 1911, describes the case of a woman who, having had one child at term and missing a period by four weeks, introduced a bougie into the uterus, apparently miscarrying and requiring currettement. The case pursued a somewhat septic course for two weeks when bleeding from the bowel began and a fish bone was found lodged in the rectum. The bleeding and septic manifestations continued, with a mass to the right of the uterus. This was found, on operation to be a gestation sac, the right tube having opened up the broad ligament and ultimately discharged into the rectum. In all, the gestation sac, four inches of bowel, the appendix which was applied to the sac, and the uterus above the cervix, had to be resected. Barring a temporary fæcal fistula, the patient made a good recovery.

Medical Review of Reviews, June, 1912.

Ophthalmia neonatorum causes 25-40% of all blindness.

There are 6000-7000 persons totally blind in the United States from gonorrhœal ophthalmia.

There are 6200 blind persons in this state, 32% of them caused by this preventable disease.

At the Pennsylvania School for the Blind from 1900-1907, 33 1/3% of the admissions was due to ophthalmia neonatorum.

173 physicians in nine cities in Massachusetts reported an average morbidity rate in infants of 10.8% per thousand births caused by this disease.

One two-hundredth of all births registered in New York State during 1906 represented the toll of blindness due to infection by Neisser's bacillus.

The average cost to the state of a person blind from birth is \$10,000.

The Crede method of treatment is effective and there is no excuse for failure to use the 2% silver nitrate solution.

TWO EFFICIENT APPLICATIONS IN HEMORRHOIDS.—W. J. Robinson, *N. Y. Med. Jour.*, July 6, 1912.

I.

- R Pulveris gallæ, 3i;
 Zinci oxidi, 3i;
 Hydrargyri chloridi mitis, 3ss;
 Bismuthi subnitratis, 3i;
 Cocainæ hydrochloridi, gr. v;
 Unguenti aquæ rosæ, 3i.
 M. Fiat unguentum.

II.

- R Pulveris gallæ, grs. v;
 Zinci oxidi, grs. v;
 Morphine sulphatis, gr. 1/4;
 Cocainæ hydrochloridi, gr. i;
 Atropinæ sulphatis, gr. 1/60;
 Olei theobromæ, grs. xxv.
 M. Fiat suppositorium No. 1. Da tales doses No. 24.

In external piles the ointment is used, well smeared in, within and around the anus, and protected with a piece of cotton partially inserted therein. In internal piles the suppositories are used. Sometimes both are required. The suppositories are used once or twice, the ointment three times a day.

ORIENTAL SORE.—S. T. Darling and A. B. Herrick, *Proceedings of the Canal Zone Med. Assn.*, Oct., 1910—March, 1911, report cases. The first was autochthonous. A protozoan closely resembling the Leischmannia Tropica was found and infection by flies, etc., seems highly probably.

BONE LESIONS OF LEPROSY.—A. B. Herrick and T. W. Earhardt, (*ibid.*) classify the bone changes as 1. Tropic, with simple atrophy and absorption; 2. Osteomyelitis or periostitis due to the bacillus; 3. Necrosis or inflammation of bone or periosteum due to secondary pyogens. 19 beautiful skiagrams illustrate the article, showing the various phases and stages.

MURRINA, a disease of equine animals in the Isthmus, is treated by S. T. Darling. It occurs in oedematous and paretic types, the former being called murrina by the natives and being always rather chronic; while the latter is termed derrengadera and may

be either acute or chronic. While apparently distinct clinically, both are due to one trypanosome, *T. hippicum*, probably introduced by a fly. All of the various mammalian trypanosomes are excluded by differences in incidence, morphology, etc., easily, except *T. equinum*, the cause of mal de caderas, also a South American equine epizootic, but for various reasons, Darling considers this distinct. While work horses and mules were the only subjects of natural infection, artificial inoculation succeeded in the saddle horse, pig, dog, raccoon, cat, two kinds of monkeys, rabbit, guinea pig, four species of rat and two of mouse, opossum, agouti and coati. The calf was refractory.

MEGACOLON.—D. Gerota, *Bull. of Soc. of Med. Sci. of Bucharest*, 1909-10, page 24. Civil engineer, intermittent obstipation since infancy, 10 days duration in 1908, section contrary to advice of consultants as last resort. Pelvic colon twisted twice on its axis, enormously distended. On account of desperate condition of patient, operation limited to untwisting. Temporary recovery. 10 months later, radical operation early in subsequent attack of obstipation. 85 c. m. of pelvic colon removed, 30-50 c. m. in circumference, 1, 1½ and 2 c. m. in thickness. Good recovery. Almost identical case, with two years between untwisting and radical operations, reported in discussion by Poenaro-Caplesco.

RECTO-VESICO-VAGINAL CLOACA. Morestin reports a case of Potel, *Le Progres Med.*, Feb. 24, 1912, due to necrosis and infection following protracted instrumental labor in a primipara. Pouchet reports a congenital case in a girl of 16, without anus or urethra but with a well developed vulvar sphincter (though not sufficient to provide perfect continence. This case was also peculiar in that the single vulvar orifice led to a double vagina into each of which a uterine neck projected. Operative results were good in both cases. In the latter, after freeing the rectum, the posterior third of the vulvar sphincter was utilized as a sphincter ani. At a second operation, a musculo-mucous bridge was partially separated from the region of the vestibule and, beneath this, the neck of the bladder was implanted. The faecal continence was excellent urinary control good by day but with leakage at night.

CHORIO-EPITHELIOMA OF UTERUS, Michele Caturani, *Post Graduate*, Jan., 1912. The case was that of an Italian, aged 43, 8 children, 3 abortions. 15 months ago, after missing a menstruation, haemorrhages set in and the uterus was curetted. After several palliative operations, curettage, partial amputation of cervix, etc., the correct diagnosis was made by microscopic examination and

a complete abdominal hysterectomy was performed in Jan., 1911, the patient remaining well to date.

Removal of Malignant Tumors of the Spinal Cord

KUWASAKU KATO (Japan)

Inaugural Thesis, Georg-August University, Gottingen

The author gives in detail the clinical notes and result of an operation for removal of a malignant tumor of the spinal cord. A spindle celled sarcoma at the level of the 8th Dorsal vertebra was removed by Brann. Pressure symptoms disappeared and after a prolonged convalescence the patient remained well for 2 years. Then a recurrence of the tumor with pressure symptoms necessitated a second operation which was again followed by fair restoration of function. 3½ years after the second operation the patient died from recurrence of the tumor complicated by diabetes and pneumonia.

The author was able to find thirty other cases recorded of malignant tumors of the spinal cord. In none of these was permanent recovery reported. A brief abstract of the thirty cases is included in the paper.

BREAST AFFECTIONS: 100 cases, Randolph and Nathan Winslow, Baltimore, *Maryland Med. Jour.*, Dec., 1911. 62 were carcinoma; 3 sarcoma; 20 fibroadenoma; 3 adeno-cystoma; 1 adeno-fibro-cystoma; 1 cystic fibroma; 2 galactoceles; 3 tubercular mastitis; 1 circumcanilicular fibro-myxoma; 4 abscess. All but one were females, the man had a fibro-adenoma. 67 women were married, 27 single, 4 not stated. Right breast affected in 40, left in 58, 2 not stated. 94 operated upon, two deaths, one quite suddenly from unknown cause, the other from pneumonia. 2 refused operation and in 4 the case was too far advanced.

Of the cancer cases, three were under 35, 17, 26, and not stated. Seven more were under 40; the oldest was 82. The authors insist on the necessity of microscopic examination, citing errors in both directions.

TOPICS OF PUBLIC INTEREST.

EXAMINATION OF DENTISTS FOR THE U. S. ARMY.—Examinations for the appointment of Acting Dental Surgeons will be held at Fort Slocum, New York; Columbus Barracks, Ohio; Jefferson Barracks, Missouri; Fort Logan, Colorado; and Fort McDowell, Colifornia, on Monday, October 7, 1912. For full in-

formation, address promptly the "Surgeon General, U. S. Army, Washington, D. C."

Acting Dental Surgeons are employed under a three years' contract, at the rate of \$150.00 per month. They are entitled to traveling allowances in obeying their first orders, in changing stations, and in returning to their homes at termination of service. They also have the privilege of purchasing certain supplies at the Army commissary. After three years' service, if found qualified, they are promoted to the grade of dental surgeon with the rank of first lieutenant, and receive thereafter the pay and allowances appertaining to that rank.

1ST INTERNATIONAL CONGRESS of *Comparative Pathology* to be held at the Faculty of Medicine of Paris, from 17th to 23d October, 1912.

Among the principal subjects, which will fill the orders of business of the seatings, the following have already their reporters:

Tuberculosis: Prof. Calmette, Prof. Vallee, M. Chaussee; Human and Aviary Diphtheria: Prof. Arloing, Prof. Rappin; Cancer: Prof. Menetrier and Dr. Clunet, Prof. Borrel; Small-Pox and Vaccination: Director Chaumier, MM. Carriere and Tomarkin, (of Genova); Parasites Peculiar Both to Men and Animals: M. Weinberg, Prof. Deve, Prof. Bodin, M. Ch. Morot, Prof. Perroncito; Nervous Affections: Dr. Marchand and Prof. Petit; Hydrophobia: Dr. Delaunay, Dr. Remlinger, Prof. Babes; Comparative Study of Cirrhoses: Dr. M. Garnier, Dr. Ravenna; Pathology of Inferior Animals: Prof. Perroncito; Milk, Prof. Porcher, Dr. Henri de Rothschild; International Organization of the Struggle Against Foot and Mouth Disease: Prof. Moussu; International Organization of the Struggle Against Melitococoy, M. Oh. Durois; Vegetable Pathology: M. Louis Blaringhem, Dr. O. Larcher, M. Louis Dop, (of Roma).

All correspondence should be addressed to General Secretary: 42 rue de Villejust, Paris.

NATIONAL TUBERCULOSIS SUNDAY, Oct. 27, 1912.—The *National Association for the Study and Prevention of Tuberculosis* announces this date as the third annual attempt at education of the people in the matter of tuberculosis, from the pulpit. In 1911, out of some 200,000 churches in the United States, over 50,000 held special services and it is hoped that still greater interest will be shown this year. This movement has our most hearty support, though we cannot refrain from suggesting that "every minister in the United States should give this subject"

a great deal more than "some attention during the week preceding or following April 28." (The date originally planned.) It occurs to us that 50,000 men, however worthy and enthusiastic, but trained along entirely different lines from those of physicians and sanitarians, include a good many who would fail to make the most of the opportunities for presenting this subject and who might, by creating alarm among nervous persons, or by failing to grasp the practical etiologic and prophylactic principles involved, do a great deal of harm. We take the liberty to suggest that the address on tuberculosis be made by some physician chosen from the congregation.

A curious fact is noted in the circular issued by the Association. While the general tubercular mortality for the registration area of the U. S. 1.6 per mille, it was 2.24 per mille for 312 church members. Why should good people suffer more from tuberculosis than the wicked? Is it because of the increased labor and confinement incident to religious services, as compared with the hours of rest and open air sport enjoyed by the worldly? Or because the religious are more often engaged in the care of the unfortunate? Or because serious illness tends to awaken a sense of religious duty?

INFANTILE PARALYSIS IN BUFFALO.—Dr. Wade H. Frost of the U. S. Marine Hospital and Public Health Service has been investigating the present epidemic. State Health Commissioner E. H. Porter has called on the profession to co-operate in stamping out the disease by prompt diagnosis and reports.

That there has been considerable acute infantile paralysis in Buffalo and surrounding towns—Silver Creek, North Tonawanda, etc.—is true. That the State and National Health authorities are justified in sending representatives to study the disease, both from the standpoint of epidemiology, of clinical medicine and of bacteriology, is admitted. But that there is anything approaching a serious epidemic as might be concluded from some of the press reports, must be denied. The incidence of the disease, from reports alone, has been much higher proportionately to the population, in many cities and, as in every other instance in which there is a chance for sensationalism, the reports are in many instances based on erroneous diagnosis—one reputed case, for instance proving to be a slight traumatism from a fall. We are sometimes inclined to believe that women are not the only ones who are anxious to be in fashion. Years ago, when amœbic dysentery was in vogue, we made a number of observations for a clinician who was most anxious to establish a diagnosis. We could find nothing but leucocytes but a young

friend very promptly found amoebae. At the same time, another physician lately promoted from the kitchen, put on record seven cases of amoebic dysentery from his own private practice. Then again, we can remember the time when malarial parasites were frequently found in the blood of Buffalo patients. Afterward, it was pretty conclusively demonstrated that there were no anopheles in the city. At any rate, either the amoebic dysentery and the malaria have died out or the interest in reporting them has. We hope the same will prove true of epidemic poliomyelitis and we are rather inclined to think that the genuine cases will ultimately be found not to represent a specific disease but to be due to the intracellularis, pneumococcus, or some other germ already well known in other sites. This is, however, a mere surmise and the subject deserves careful consideration while it is better to err on the side of too great apprehension.

LEPER REMOVED FROM BUFFALO. The leper discovered in Buffalo last month was, after consultation with various health authorities, spirited away from the city. The Common Council made some objection to paying transportation charges without definite information as to the place to which he was taken but it was thought best to keep the matter a secret. We hazard the guess that some university has brought influence to bear so as to keep the case under observation.

HORNELL WATER PURE. The state chemist has found the water supply free from dangerous organic and organized matter, though disagreeable in odor from the presence of algæ. The same algæ infest the Warsaw water.

CORNING FREE FROM TYPHOID. As announced last month, the Corning water supply is now free from infection and the epidemic is past, while preparations are being made for an abundant supply of water from local deep wells, properly protected. One case of typhoid is being treated in the Buffalo Homoeopathic Hospital, contracted by a nurse from Buffalo in Corning.

NIAGARA RIVER TO BE KEPT FREE FROM GROSS CONTAMINATION. The British Government has approved of the plan for an International Joint Waterways Commission, to regulate the disposal of sewage flowing at present into Niagara River. Buffalo is probably the chief source of danger though most of the typhoid in Buffalo is contracted outside the city. Many small

Canadian towns sewerage into streams tributary to Niagara River or Lake Erie, also add to the danger. We are inclined to think that the compulsory diversion of Buffalo sewage from the river can be made a source of profit to the city. Sewage, handled on a large scale, is a valuable commodity. It would seem that, somewhere north of the city, a tract of cheap land could be bought, where sewage could be delivered mainly if not entirely by gravity, and that the sludge could be prepared for fertilization of slow growing crops—not vegetables and fruits—or that, following the plan of some European cities, the “drizzle fields” as they are so well termed in Germany could be themselves used as municipal farms. In this connection, we may mention that much of the garbage of Omaha is used to feed swine near the city, instead of being destroyed or “rendered.”

28TH CHILD BORN.—A negress of Niagara Falls gave birth Aug. 7, to her 28th child. She has been married twice, is now 44 and was first married at 16. She has had triplets twice, twins three times.

RUPTURE OF BOWEL FROM AIR INTRODUCED PER ANUM.—Buffalo has recently had a second case of this sort, from the fooling of workmen with a compressed air hose. Death resulted in each case. A similar case was reported from Chicago several years ago and also by E. W. Andrews of Chicago in the *Jour. of Surgery, Syn. & Obstet*, Jan., 1911, with operation and recovery, and the accident has occurred a few other times. We understand also the inflation of the bowel and of the stomach with air, as well as distention with water, were formerly approved methods of torture. We were privileged to attend the necropsy on the first Buffalo case and, following it, made some observations on the patulousness of the anus, as it was surprising that the bowel could be distended to a dangerous degree by a blast of air simply held against the outer clothing over the anus. By using a stream of water under moderate pressure it was found that, especially with the body immersed in warm water, the current was sufficient to pass the sphincter very readily, even when the nozzle of the hose was not in contact with the anus.

RAT PLAGUE AT NEW ORLEANS.—July 27, after several hundred negative examinations, bacilli of buconic plague were discovered in a rat. While no immediate fear of a spread of infection is entertained, it is disconcerting to learn that even one possible source has been found at our ports.

RIGHT OF SURGEON TO EXTEND OPERATION ACCORDING TO INDICATIONS.—Judge Garrison of the Supreme Court of New Jersey, decided on July 14, that a surgeon has the right to use his judgment in extending an operation to meet indications. It should be noted, however, that this opinion is not necessarily binding in New York and there are certain features of the case to be considered; notably that the Judge was himself formerly a physician and that the suit which led to the decision was for damages under the technical term of assault and battery, by a charity patient, also that the modification of the operation was considered necessary to save life and that the patient was in good health at the time of the suit.

LIMITATION OF INSURANCE AGAINST MALPRACTICE SUITS.—Our attention has been called to the fact that certain policies against malpractice suits provide that the company shall not be responsible for damages and expenses in case of counter-suit against a suit for professional compensation. It is stated that this renders the insurance worthless in the great majority of all cases. Examine your own policy.

PURE FOOD REFEREE DECISIONS FINAL. — Attorney-General Wickersham has decided that no appeal can be made from decisions made by the Board composed of the Secretaries of Labor and Agriculture, Commerce and the Treasury.

OPPOSITION TO IMMIGRATION.—The American Federation of Labor, as part of its campaign to unionize the iron and steel industry and raise wages, advises its members in writing to friends abroad to discourage immigration for the next few years.

INCREASED COST OF LIVING.—On account of the advance in price of meat, New York restaurants have made a general increase of about 16% on meat orders, sometimes increasing the charge for vegetables also.

STERILIZATION OF CRIMINALS AND LUNATICS.—Indiana, California, Connecticut, Utah, Oregon, Iowa, New Jersey and New York have passed laws providing for the sterilization of the hopelessly unfit. The state medical societies of Florida, Louisiana and N. Dakota (homoeopathic in the last) have petitioned the legislatures for similar laws. The *Texas Medical Journal* (independent) is agitating for a similar law. It may be of interest to know that somewhat analogous laws existed in America many years ago. In a book of travel two hundred years old, it is stated that one of

the Central American tribes—and presumably others—entertained quite up-to-date notions as to morality. Any man who seduced a virgin was tried, and if found guilty, a twig of a thorn-bearing plant was introduced into his urethra and given a twist. In a hot climate infection, retention of urine and death was likely to follow. If not, the culprit was apt to behave himself for the future.

ANNIVERSARY RETURN OF LESIONS.—There is a popular impression that many lesions tend to return more or less exactly a year later, without repetition of the cause. Dr. Howard Crucher of Roswell, New Mexico, reports the lesions of diamond-back rattler bite, with diamond shaped patches, returning year after year; also a similar return of coyote bite. (*Am. Med.*, Aug., 1912). We have heard the same story about poison ivy but, in a moderate experience in camp, have never noted an anniversary return. At the risk of seeming credulous, we would ask for reports pro or con, in regard to the general topic of anniversary recurrence. It is not impossible that an intense sui-suggestion might give rise to such phenomena, analogous to the classic stigmata.

AFTERMATH OF THE TITANIC DISASTER.—There can be no objection to a proper inheritance tax but it is somewhat disagreeable to think that we made money out of the loss of life from the Titanic, to the amount of about 45 cents for every man, woman and child in New York State.

CHICKENS IN CITIES.—Buffalo is agitating the matter of legislating against the keeping of chickens and it is proposed to have an ordinance by which two neighbors can compel the removal of a rooster that disturbs them by crowing. At first thought, it seems that the harboring of domestic animals in a city ought to be forbidden by law but there are some arguments on the other side. Chickens do not readily and essentially contract and disseminate any human disease. Care of poultry is profitable even on a small scale. It is often a very efficient aid against disease to have a few fresh eggs a day and an occasional non-storage fowl. Keeping chickens is good training for boys and girls. With the high cost of foods, every egg and every chicken produced is a benefit, even to those who would not themselves keep poultry. There are a great many noises quite as objectionable as cackling and crowing and nervous persons who would be awakened too early by roosters, would very likely already be awake on account of horseless and muffler-less vehicles, whose ubiquity at all hours

of the night impresses every night-worker. Roosters can be rendered practically noiseless by section of the very accessible vocal cords—an operation which is very simple and almost painless.

FEE SPLITTING TABOOED IN TEXAS.—The State Medical Association has made fee splitting “an offense punishable by reprimand, suspension or expulsion” of a member.

The *United States Civil Service Commission* announces examinations to be held on September 11, 1912, at various places. Male physicians are needed at nine posts in the Indian service, salaries \$1,000-\$1,200.

CANCER BACILLUS discovered by Dr. Gaston Odin of Paris, positively identified and successfully cultivated; vaccine hoped for. This is the gist of press dispatches of Aug. 14, 1912. Having enthused at intervals for some years over the discovery of cancer germs, all we have to say is “may be.”

LOSS IN WAGES BY SICKNESS. The N. Y. Dept. of Labor estimates that \$366,000,000 was lost by 13,400,000 wage earners in the U. S. last year. Allowing for the fact that many included are probably permanently and hopelessly disabled, the per capita loss of less than \$30 does not seem improbable but it is much higher than it should be. Many wage earners “lay off” with astonishing facility on account of what seem to more stoic persons, to be very trivial ailments. And, a good deal of reported sickness is simply drunkenness, or an excuse for idleness without any ground in fact. The same applies to persons not classed as wage earners. It is only fair to consider, too, that a headache, bruised finger, crick in the back, etc., which a professional or business man can afford to ignore, actually disable one engaged in mental detail work or manual labor. Moreover, the former can favor himself by postponing part of his work for a day or two, by telephoning, or by relegating details to assistants whereas the latter must actually lose time.

The N. Y. Association for Labor Legislation (Paul Kennaday, Secretary, 131 E. 23d St., N. Y. is making a systematic effort to learn what part of this great loss is due to preventable indisposition on account of bad ventilation, poisonous vapors, mental and physical overstrain, machinery traumatism, etc.; and also to instruct and, if necessary, compel employers to remedy such defects. A booklet on Industrial Diseases will be mailed to every physician in the state and we bespeak the assistance of every one, in this philanthropy.

PYGOMELIA IN MAN, Dr. A. Baudrimont, *Jour. de Med. de Bordeaux*, June 16 and 23, 1912. This is an interesting review of literature beginning with an illustration of a three-legged duck and of a four-legged cow, or rather hermaphrodite bovine, since there was a common anus, a vulva of the autosite and a testicle and penis of the parasite. The case of Frank Lentini, a well built man with three legs is described and illustrated. A full report is made of the case of Miss S., for the first time, though including notes previously made by Pean and others. She was born in 1860 and died in 1880 from septicaemia originating in ulcers on the pygomic leg. Illustrations are given showing the condition at the age of ten and shortly before death. The necropsy was secured with considerable difficulty owing to the desire of the "barnum" to exhibit the cadaver. In brief, the principal abnormalities consisted of a third leg, the stump of another, two vulvas, two functioning urethras, two bladders, two kidneys but one atrophic, two uteri, a pelvic tumor containing none of the ordinary features of a dermoid cyst but apparently representing small intestine, an external, pelvic, supernumerary mamma. We recommend a close study of this deport by those interested in teratology and will hold the originals for consultation for a short time, after which they may be consulted at the Grosvenor Library.

NEW INVENTIONS

Meredith Clark, Garden City, N. Y. 1,034,424. Measuring Device.

F. E. Stockelback, Detroit, Mich. Assignor to Frederick Stearns & Co., Detroit, Mich. 1,034,566. Process of Manufacturing Diacetyl-Paramido-Phenol.

A. A. Barratt, Claygate, Eng. 1,034,566. Nostril-Distending Apparatus.

A. W. Ekstrom, Los Angeles, Cal. 1,034,599. Process of Manufacturing Alkali Hydroxids.

G. H. Rabenalt, Dover, N. J. 1,034,646. Process of Purifying Hydrogen.

C. S. Ruckstuhl, St. Louis, Mo. 1,034,735. Thermometer.

Emil Hartwig, Jersey City, N. J. Assignor to Pomeroy Co., N. Y., N. Y. 1,034,793. Truss.

Chas. Ogilvy, New York, N. Y. 1,034,821. Mask used in Applying Anesthetics.

R. B. Higgins and Herman Albers, St. Louis, Mo. Assignors to Higgins, Albers Concrete Form Co., St. Louis, Mo. 1,034,913. Concrete Floor Decking.

M. W. Guioness, Philadelphia, Pa. 1,035,002. Bath-Cabinet.
W. J. Cameron, Enid, Okla. 1,034,417. Liquid-Fuel Burner.
Henry Hendricks, Alton, Ill. Assignor to F. R. Hendricks,
Alton, Ill. 1,034,451. Rotary Gasolene Engine.

M. W. Johnson, Jr., Birmingham, Ala. 1,034,463. Gas
Washer.

Chas. White, Baltimore, Md. 1,034,549. Gas Engine.

C. E. Brown, Columbus, Ohio. 1,034,577 Fuel-Oil Burner.

Max Glass, Vienna, Austria Hungary. 1,034,612. Lubricator.

F. E. Yates, Minneapolis, Minn. 1,034,669. Valve for Gas
Burners.

B. M. Aslakson, Salem, Ohio. 1,034,673. Gas Engine.

W. C. Bosley, Houston, Tex. 1,034,682. Rotary Engine.

Reinhardt Daae, Pittsburgh, Pa. 1,034,695. Gas-Producer.

A. S. Freeman, Alexandria, Ind. Assignor to Freeman Mfg.
Co., Alexandria, Ind. 1,034,702. Gas Generator.

Wm. Henry, Philadelphia, Pa. 1034,708. Valve for Internal
Combustion-Engines.

J. W. Packard, Lakewood, N. Y. Assignor to Packard Motor
Car Co., Detroit, Mich. 1,034,728. Water-Cooling System for
Hydrocarbon-Engines.

J. H. Pierce, Bay City, Mich. Assignor to J. H. Budd, Wil-
mington, Del. 1,034,732. Engine.

L. T. Rhoades, Mont Clare, Pa. 1,034,835. Sparking Me-
chanism for Internal-Combustion Engines.

A. W. Bowden, Greenville, Me. 1,034,866. Safety Gas Burner.

David Brain, Los Angeles, Cal. 1,034,869. Steam Generator
for Liquid Fuel Burners.

G. F. Clark, Daytona Beach, Fla. 1,034,874. Device for Re-
moving Valve Springs.

H. E. Coffin and G. G. Behn, Detroit, Mich. Assignors to
The Reynolds Motor Co., Detroit, Mich. 1,034,877. Rotary
Valve for Explosion-Engines.

Eugene Deruntz, St. Louis, Mo. 1,034,889. Oil Burning
Apparatus.

Jan H. Windemuller, Rotterdam, Netherlands. 1,035,127.

A. A. Low, Horseshoe and Harry Hertzberger, New York,
N. Y. Said Hertzberg assignor to said Low. 1,035,614. Vapor-
izing Device for Explosive Engines.

A. C. Becker, Oakville, Can. Assignor to Waterbury Mfg. Co.,
Waterbury, Conn. 1,035,639. Inverted Burner.

F. H. Struble, New York, N. Y. Assignor to J. C. Klatzi,
N. Y., N. Y. 1,035,653. Gasolene Filter.

H. C. Albrechy, Terre Haute, Ind., and J. P. McGee, Paris,
Ill. 1,035,673. Vapor-Lamp.

J. E. Munyan, Deceased., Mantua, N. J. 1,035,807. Oil-Filter.

W. W. Dake, Muskegon, Mich. Assignor to Pyle-National Elec. Headlight Co., Chicago, Ill. 1,035,820. Elastic-Fluid Turbine.

F. G. Cottrell, Berkeley, and H. A. Burns, Oakland, Cal. Assignors to International Precipitating Co., San Francisco, Cal. 1,035,422. Apparatus for Separating Suspended Particles from Gaseous Bodies.

E. M. Lloyd, San Jose, Cal. Assignor to T. H. Ball, San Jose, Cal. 1,035,455. Burner Attachment.

J. H. T. Mills and V. H. Mills, Hubbard, Tex. 1,035,459. Oil-Burner.

E. A. Radunz and Otto Englehardt, Toledo, Ohio. 1,035,467. Safety-Valve for Gas-Lines.

J. N. Ruffin, New York, N. Y. 1,035,474. Caloric Engine.

B. F. Stewart, Chicago, Ill. 1,035,488. Gas Engine.

G. A. F. Ahlberg, Chicago, Ill. 1,035,513. Internal Combustion Engine.

T. M. Sandiford, Masterton, New Zealand. Assignor to The Automatic Gas Pressure Lamp Lighter Co., Ltd., Masterton, New Zealand. 1,035,477. Apparatus for Lighting and Extinguishing Gas Lamps.

Fred'k Dietz, New York, N. Y. Assignor to R. E. Deitz Co., New York, N. Y., and C. T. Ham Mfg. Co., Rochester, N. Y. 1,035,549. Tubular Lantern.

W. F. Goodwin and Geo. Dawson, San Francisco, Cal. 1,035,576. Automatic Oil Stoker.

P. A. Guye and C. E. Guye, Geneva, Switzerland. 1,035,581. Apparatus for Producing Endothermic Reactions in Gases.

C. C. Keyser, Pensacola, Fla. 1,035,600. Internal Combustion Engine.

A. C. Stewart, Los Angeles, Cal. 1,035,651. Auxiliary Air Valve for Carbureters.

H. F. Liedtke, Wilkinsburg, Pa. 1,035,713. Turbine Governor.

C. E. Arundel, Wash., D. C. Assignor to W. F. Robertsm, Wash., D. C. 1,035,137. Acetylene Gas Burner Tip.

W. W. Boa and Karl Schoenbauer, Grand Rapids, Mich. 1,035,150. Starting Device for Explosion Engines.

F. J. Madden, Albert Lea, Minn. Assignor to O. K. Earle, Minneapolis, Minn. 1,035,208. Automatic Cut-Off Valve for Gas Burners.

E. V. Reno and J. A. Bois, La Garenne-Colombes, France. Assignor to Sphinx Motor Co., New York, N. Y. 1,035,234. Internal Combustion Engines.

R. V. Smith, Salt Lake City, Utah. Assignor to Arvis Motor Co., Salt Lake City, Utah. 1,035,253. Rotary Engine.

John West, Southport, Eng. 1,035,287. Discharging and Charging Machine for Gas Retorts.

J. T. Bethel, So. Richmond, Va. 1,035,307. Lamp Burner.

D. E. Collard, Jefferson, Colo. 1,035,318. Ignition Apparatus for Explosive Engines.

P. W. Kane, Chicago, Ill. Assignor to Kane Machinery Co. 1,035,356. Starting Device for Explosive Engines.

P. A. Painchaud, Plessisville, Que., Can. 1,035,383. Starting Mechanism for Internal Combustion Engines.

H. S. Simpson, Fairbury, Neb. Assignor to C. H. Shaffer, Fairbury, Neb. 1,035,391. Internal Combustion Engine Cylinder.

I. N. Lewis, U. S. Navy. 1,035,454. Internal Combustion Power Apparatus.

F. M. Ashley, New York, N. Y. 1,035,517. Gas Burner.

H. E. Curtis, West Hampstead, London, Eng. 1,035,163. Abdominal Support for Medical and Surgical Purposes.

O. H. McQuary, Jr., Lawrence, Kans. 1,035,217. Face Protector.

E. M. Smith, Martin, Mich. 1,035,252. Athletic Device.

Hermann Stumpf, Berlin, Ger. 1,035,261. Atomizer.

B. D. Knickerbocker, Chicago, Ill. 1,035,362. Bath Cabinet.

Richard Cartwright, Salem, Ore. 1,035,417. Truss.

Jan Steynis, Bay Shore, N. Y. Assignor to Steynis Ozone Co. 1,035,489. Apparatus for the Production of Ozone.

M. H. Turner, Washington, D. C. 1,035,500. Truss.

John Connery, St. Louis, Mo. 1,035,535. Medicated Air Compound.

J. J. DeGloria, Oakland, Cal. 1,035,546. Suppository.

Maria Rosse, Chicago, Ill. 1,035,642. Invalid Carrier.

S. E. Walton, Mountainair, N. Mex. 1,035,760. Crutch.

Edward Abadie, Leotard, Paris, France. 1,035,764. Hernial Bandage.

Victor Guinzburg, New York, N. Y. Assignor to I. B. Kleibert Rubber Co. 1,033,097. Baby Pants or Diaper-Cover.

Werner Siebert, Rheinfelden, Baden, Ger. 1,033,126. Method of Producing Enothermic Compounds from their Components.

John Barnes, Rockford, Ill. 1,033,147. Truss.

John Sklar, Brooklyn, N. Y. 1,033,627. Obstetrical Forceps.

J. A. Singmaster, Palmerton, Pa. 1,033,127. Manufacture of Producer-Gas.

O. P. Underwood and R. S. Hill, Des Moines, Iowa, said Underwood assignor to H. C. Mills, Des Moines, Ia. 1,033,130. Carbureter.

G. D. Dillon, Kansas City, Mo. 1,033,160. Explosive Engine.
E. F. Hall, Minneapolis, Minn. 1,033,314. Gas Cock Attachment.

Chas. Wiebke, Newark, N. J. 1,033,364. Antifluctuating System for Gas Distribution.

Adolfo De Clairmont, Toledo, O. 1,033,386. Attachment for Carbureters.

W. W. Kemp and W. H. Van Horn, Baltimore, Md. Assignors to C. M. Kemp Mfg. Co., Baltimore Md. 1,033,416. Gas Burner.

C. A. Morris and W. H. Merritt, Red Bank, N. J. 1,033,443. Carbureter.

M. C. White and O. C. Duryea, Los Angeles, Cal. 1,033,503, 1,033,504. Internal Combustion Power Hammer.

J. D. Hopkins, Clinton, Ia. 1,033,588. Hot Water Heater.

F. J. Kaeser, Reno, Nev. 1,033,594. Oil Burning System.

J. B. Nau, New York, N. Y. 1,033,611. Gas Producer.

Han Wilhelm C. Schroder, J. H. Drager and Alex. B. Drager, Lubeck, Ger. Assignors to The Firm of Dragerwerk, Heinr & Bernh., Drager, Lubeck, Ger. 1,033,626. Apparatus for Testing Gas.

G. H. Waters, Greer, S. C. 1,033,641. Self Heating Sad Iron.

H. H. Hustead, Brown, W. Va. 1,033,700. Safety Gas Cut-Off.

Gabriel Iochum, Paris, France. Assignor to L. J. Guitard, Paris, France. 1,033,701. Rotary Explosion Engine.

E. K. Standish, Waltham, Mass. 1,033,748. Rotary Explosion Engine.

G. W. Hutchinson, Walton, New Zealand. 1,033,760. Internal Combustion Engine.

R. S. Dickinson, Los Angeles, Cal. 1,034,213. Rotary Internal Combustion Engine.

A. B. Cobb, Waterbury, Conn. 1,034,204. Purifier for Acetylene Gas.

H. L. Doherty, New York, N. Y. 1,034,215. Apparatus for Removing Suspended Matter from Gases and Vapors.

H. L. Doherty, New York, N. Y. 1,034,216. Apparatus for Removing Suspended Liquids and Solids from Gases.

C. G. Farez, Coney Island, N. Y. 1,034,224. Gas Burner.

J. T. Metcalfe and Garfield Metcalfe, Quincy, Pa. Assignors Minneapolis, Minn. 1,034,264. Gas Meter Leak Detector.

J. T. Metcalfe and Garfield Metcalfe, Quincy, Pa. Assignors to Quincy Engine Co., Quincy, Pa. 1,034,298. Gasolene Spray or Vaporizer Valve.

Wilber Proffitt and G. H. Brooks, Mars, Pa. 1,034,298. Automatic Gas Shut-Off Valve.

Robt. Runnion and Alonzo Runnion, Spencer, W. Va. 1,034,304. Burner.

O. C. Dennis, Chicago, Ill. 1,033,788. Bust Form.

M. H. Kutch, Terre Haute, Ind. 1,033,808. Vaginal Douche Cup.

Nathan Sulzberger, New York, N. Y. 1,033,841. Derivatives of Metacresol with Organic Acids.

G. T. Fette, Cincinnati, Ohio. 1,033,883. Electromagnet for Surgical Purposes.

H. B. Schultz, Atlanta, Ga. 1,033,957. Abdominal Supporter.

Max Englemann, Elberfeld, Ger. Assignor to Farbenfabriken Vorm Friedr Bayer & Co., Elberfeld, Ger. 1,034,092. Pharmaceutical Products.

Max Englemann, Benedikt Merkel, and Georg Wesenberh, Elberfeld, Ger. Assignors to Harbenfabriken Vorm, Friedr, Bayer & Co., Elberfeld, Ger. 1,034,093. Disinfecting Agents.

A. C. Knowlson, Ann Arbor, Mich. 1,034,123. Nostril Expander.

Max Stern, Elberfeld, Ger. Assignor to Farbenfabriken Vorm Friedr, Bayer & Co., Elberfeld, Ger. 1,034,161. Cholesterin Preparation.

Ludwig Taub, Elberfeld, Ger. Assignor to Farbenfabriken, Vorm Friedr, Bayer & Co., Elberfeld, Ger. 1,034,166. Disinfecting Agent.

G. P. Vanier, Stellton, Pa. 1,034,170. Potash Bulb.

F. S. Young, Newark, N. J. 1,034,330. Process of Manufacturing Magnesium Carbonate.

W. J. Kappeler, deceased, Akron, O., by Mamie Kappeler, Executrix, Akron, Ohio. 1,034,388 Window Canopy.

H. H. Bunzel, Washington, D. C. 1,034,400. Method for Determining the Oxidase Content of Plant Juices.

Henry Collinet, Chicago, Ill. 1,033,783. Gasolene Engine.

J. B. Larson, Minneapolis, Minn. Assignor to E. T. Engstrom and W. M. Higley, Minneapolis, Minn., and J. B. Lee Company. 1,033,809. Tray for Gas Purifying Tanks.

C. W. Beck, Rockville Center, N. Y. Assignor to Oxweld Acetylene Co. 1,033,863, 1,033,864. Acetylene Gas Generator.

A. W. Hutchins, Providence, R. I. Assignor to W. C. Woodward, Providence, R. I. 1,033,897. Fuel Shipping Tank.

W. M. Gentle, Greenwood, Ind. 1,033,886. Carbureter.

W. S. Lee, Detroit, Mich. 1,033,911. Explosion Engine.

BUFFALO MEDICAL JOURNAL

A Monthly Review of Medicine and Surgery

EDITOR

A. L. BENEDICT.

All communications, whether of a literary or business nature, books for review and exchanges, should be addressed to the editor, **228 Summer Street, Cor. Elmwood Avenue, Buffalo, N. Y.** **Subscribers, advertisers and exchanges please revise address.** Please make personal or telephonic calls before 1 p. m.

THE BUFFALO MEDICAL JOURNAL will publish regularly, full transactions of any professional organization in western New York at cost. Personal notices, brief reports of society proceedings, and the like, are always welcome and will be published without charge.

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SEPTEMBER, 1912

No. 2

Don't swat the fly, retail; stop its breeding, wholesale.

The Possibilities of Paternalism in Medicine.

THE British medical profession is complaining bitterly about the effects of recent legislation in providing medical care as a matter of governmental aid. Yet from an impartial standpoint, it can scarcely be disputed that the poverty, both of a large part of the east end of London and of other cities and even villages of the whole country, require some adequate system of state aid. Jack London's "People of the Abyss," claiming to have been written from an actual sojourn among and sharing of the life of the English poor, is either a gross exaggeration of facts or a justification of almost any scheme of relief, however socialistic.

In the United States, there are those who already see a cloud, bigger than a man's hand, and threatening to extend over the sky. An increase in wages of a hundred per cent. in a life time has failed to give satisfaction. Prices of almost every commodity have risen, perhaps not proportionately with wages but to such a degree as to cause hardship among those not ordinarily considered "the working class" and to lead the latter class to ask what real increase in income has come about and to demand a constantly increasing wage-scale.

Excepting a few abortive attempts in state legislatures, no movement has been made toward legislation which would threaten the welfare of the American medical profession, like that recently

passed in England but it requires no excess of pessimism to note similar tendencies. The interest shown in the crusade of the Medical Society of the County of Erie against contract practice, indicates that this is no local issue. The check on the crusade by the State authorities indicates clearly that the crusade cannot be carried on by intra-professional legislation but can succeed only by practically unanimous voluntary professional refusal of services at cheap rates, wholesale. This can be secured, in turn, only by such an equalization of supply of and demand for medical service, as shall make all or at least, the majority of individual practitioners, independent.

Paternalistic provision of medical aid is naturally and properly accorded to the poor. Not only is the medical profession itself willing to concede this but it has been the worst offender against the principle that charity should not be abused. It has established a precedent, contrary to that applying to practically every other form of charity—lodging, food, fuel, clothing, education, amusement—that medical charity should be at the expense of the medical profession, not of the community at large.

Free medical aid is provided not only for the poor but for soldiers and sailors, including the militia when in actual service and in some additional respects, and the merchant marine at all times that they see fit to apply for it. It is extended to all classes except the very limited one which actually insists on making payment, in regard to vaccination both against small pox and, to some extent, against typhoid and other diseases. The same statement may be made regarding many forms of diagnostic service.

About a quarter of the total population of the United States is frankly foreign, and has brought with it the expectation of free medical attendance. There is also a tendency to force charity on many other persons, not requiring it, in connection with all sorts of institutions as for the treatment of tuberculosis, insanity, and the care of epileptics, the blind, the mentally feeble and other more or less dependent individuals even though the family of the patient is abundantly able to pay for medical attendance.

A very significant illustration of the general tendency to demand from the medical profession more than its share of free service, is the fact that salaried medical officers are, with the exception of a comparatively few executive heads, paid merely nominal salaries, as compared with the proportionate skill and sacrifice demanded of teachers, firemen, policemen, laborers, male and female, and other employees of the nation, state, county, city, etc.

When we add to the general provision for the poor and dependent class, the numerous forms of wholesale medical aid pro-

vided by governmental units for the sake of securing better hygiene and sanitation, the still more numerous forms of providing for soldiers, sailors, policemen, firemen and other employees of the various governmental units, and the similar provision by a large variety of private corporations (mining, manufacturing, operating railroads, steamships, etc.) not to mention benefits of fraternal societies of various kinds and wide extent, it must be acknowledged that the country is criss-crossed with schemes of cooperative medical aid which need only one of three conceivable forces to render them as complete as that with which the British profession is now grappling.

These three forces are: 1. A comparatively slight failure of national self-respect or, rather of mental attitude toward the receipt of cooperative philanthropy; 2. A comparatively slight additional pressure of general poverty; 3. Socialistic legislation, as in England, which would undoubtedly follow and set the official seal upon either of the other forces.

As to the first, it has already been noted that at least a quarter of our population is already inclined to regard medical philanthropy as a natural and proper assistance. The rapid increase of the tipping system, the precedent of accepting education, both in schools, libraries, museums, and lecture courses for adults, the extension of public amusements, the steady influx of immigrants almost inevitably point toward a removal of personal pride as a barrier to the acceptance of free medical service. That the other two forces are growing in strength needs no argument.

The average wage of the medical profession, in terms of the average day's labor or of the purchasing power of the dollar, has declined for the simple reason that the latter two standards have been changing in converse relations, while the standard professional fee has remained almost stationary. Even the large fees of surgeons and specialists are either occasional or, considering the radical nature of the relief conferred, relatively cheap as compared with the smaller, repeated fees of a generation ago for necessarily palliative measures.

How can the medical profession prepare itself for the threatened cataclysm or the more probable gradual increase of economic stress? Only by a systematic, intelligent recognition of the inexorable law of supply and demand, a recognition, selfish in one sense but too broad to consider either personal need or personal absence of economic pressure, and ultimately unselfish in recognizing the equally inexorable law that efficiency, on a broad scale, must be based on properly paid labor. If the demand for medical services is only equaled by the supply, the profession can meet with equanimity any tendency toward private coopera-

tion to provide insurance against sickness and injury, or toward governmental paternalism. And if, as at present, the supply exceeds the demand, it makes very little difference whether socialistic legislation actually occurs or not, for the underlying economic forces will bring about the same disaster, with mere suffering because more gradually and slowly crushing the individual members of the profession.

Errors.

Our attention has been called to some errors in the August issue. We are obliged for the criticism but they had already been noticed and made the subject of prayer—at least the individual words might have been in a prayer of the highly orthodox. We would like to make this general announcement as to verbal errors. Contributors are expected to prepare their own articles and to revise proof. We are glad to make an exception in favor of those unfamiliar with the language; otherwise, it seems to us that a grown man ought to be able to dress his thoughts in words just as he is expected to be able to dress his body in clothes. Hence, with occasional exceptions due to distance, etc., hold the author responsible for errors in the original department. In the editorial and various news departments, errors should be charged to the editorial staff. When, as in the August issue, whole lines were dropped or misplaced, it may be taken for granted that both galley and page proof had been properly revised but that a form ready for the press was accidentally dropped and the linotype pi was not properly rearranged. This kind of blunder is about the only one that can properly be charge to the printer and not so much to the compositor as to the men who finally handle the forms. We have had articles in writing which were in parts, unintelligible both to the printer and the editor, so that phrases had to be omitted altogether. Printers such as work on this JOURNAL make surprisingly few mistakes, even in dealing with highly technical matter and we do not believe in making them the scape goat for our own and other writers' blunders.

Dr. W. A. MacPherson of N. Tonawanda, asks us to correct the statements that his patient gained 95 pounds in four or five weeks under Dr. Dowd's phorphorus tonic. This would be too high praise and would produce an idea that this excellent remedy was being exploited by extravagant methods. The fact was that the patient gained 15 pounds. This error was neither due to printer nor proof reader but to the typewriter who prepared the report.

BACK NUMBERS. Owing to a considerable and growing demand for extra copies of the JOURNAL, we would ask subscribers whose copies are lost in the mail or who wish additional copies, to notify us before the tenth of the month. We still have extra copies of most of the issues up to the end of Vol. 66 (1910-11). Of Vol. 67, (1911-12) there are, at the date of writing, just 40 copies in all, an average of less than four an issue, and many of these are marked in various ways; although we have always ordered what seemed to be a liberal number of copies beyond the regular subscription list. This is a wholesome kind of poverty.

Dr. Hektoen's lectures will be continued in the October, and concluded in the November issue.

When the advertising pages, inclusive of table of contents, a reasonable allowance of "readers," etc., are numbered up to L (50), and can be maintained at that number, the subscription rate will be reduced to \$1.50 net, in advance, for subsequent volumes. We ask our readers' cooperation to secure this desired object, both by hints, to us, an occasional word of commendation to prospective advertisers and by paying attention to the advertisements. In corresponding with advertisers, please mention the JOURNAL as any error in following a key will deprive the JOURNAL of the credit due. Also, help all periodicals, the postman and save your own time and that of busy men generally by passing circulars promptly to the W. P. B.

INFORMATION WANTED

We have often been impressed with the difficulty of obtaining definite information on topics not readily elucidated by reference to dictionaries, cyclopædias, and ordinary text books. Theoretically the published question is the ideal way of getting exact information, of value not only to the inquirer but to many others equally ignorant, who may not even have had their attention called to the particular vacuole. Practically, the Question Box in any kind of a magazine, is liable to degenerate. However, in spite of the warning from the experience of others, we shall, from time to time, publish requests for information, beginning with the following questions, answers to which have not been readily obtained in the regular ways.

1. Temperature. What effect has an air temperature higher than that of the body, upon the mouth temperature? What practical precautions are taken in hot climates to register the correct mouth—or rectal—temperature?

2. Small pox. Is the identity of vaccinia with (modified) variola now generally conceded? What is the modern opinion as to vaccination as a therapeutic means, after variola has begun?

3. Inherited immunity against semelident infections. These diseases (exanthemata and a few others) very often cause abortion. If not, it is still an open question how far the disease in the mother during pregnancy, protects the offspring. We would be glad of reports of cases showing, on the one hand, resistance to exposure, to vaccination, mitigation of severity of acquired infection; and, on the other hand, cases apparently showing the failure of immunization; also of any observation for or against actual communication of the disease to the foetus.

4. Distribution of infection according to animal species. We have quite a number of notes indicating that certain infections do not occur spontaneously, or even cannot be produced except by exaggerated artificial exposure, in certain animals; as well as a miscellaneous series of notes as to the susceptibility of man and other animals to infections. The prevalent notion as to the extreme susceptibility of man, as compared with the lower animals, does not seem to be correct. We would be glad of detailed observations on these points and particularly of general principles as to the range of infectivity according to species, genera, orders and phyla.

5. Chylous accumulations. In preparing as complete a list as possible of chylous cysts of the mesentery, we would be greatly obliged for notes of cases, references to literature, etc.

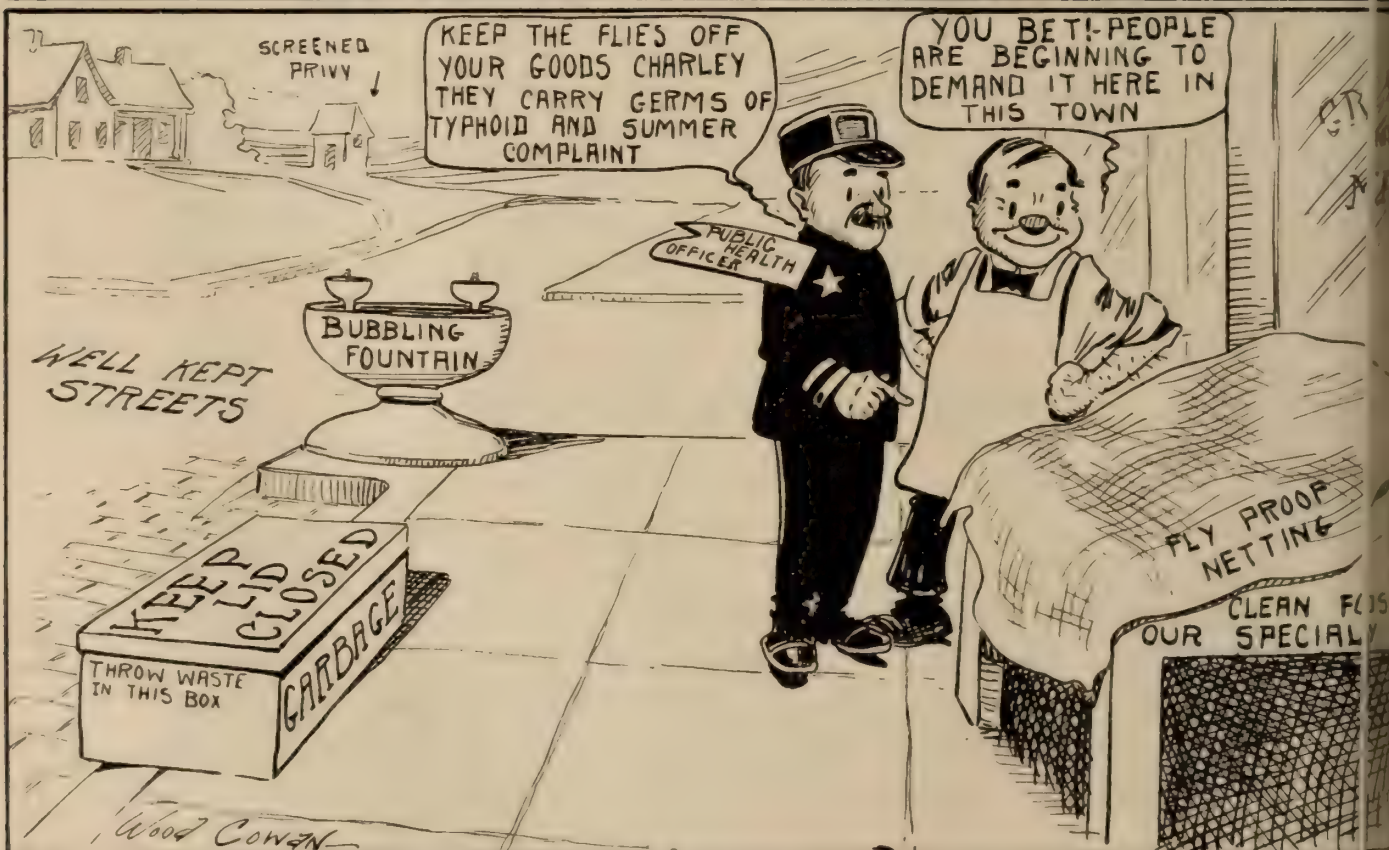
6. Pioneer Physicians. Published and unpublished biographic notes are desired on all American physicians of the seventeenth and eighteenth centuries.

OUR CONTEMPORARIES.

The *Old Dominion Journal of Medicine and Surgery* of May, 1912, comments editorially on an article by Dr. F. D. Snyder, of Ashtabula, in the *Cleveland Medical Journal*, of March, on the Prehistoric Surgeon. The Peruvian skulls, mentioned, showing trephine marks, were on exhibition at the Pan-American Exposition. The editor has a government publication describing and illustrating them which may be of interest to our readers.

N. A. R. D. Notes for Thursday, July 25, 1912, is an unusually attractive, well illustrated issue of extra size in commemoration both of its own tenth anniversary and of the 14th annual convention of the Association at Milwaukee, Aug. 12, 1912.

ARE CONDITIONS IN YOUR TOWN LIKE THIS! OR-



ARE THEY LIKE THIS ?

The accompanying cartoon is from a plate kindly loaned by the State Board of Health of Michigan and originally published in their bulletin for July, 1912

The *Homoeopathic Envoy*, of August, reproduces, under the title of "The Allopathic Point of View," our rejoinder to "Jane" of the *Buffalo Express* (see January issue) in which we insisted on the necessity of certain harsh methods like vaccination. The *Envoy* says:

But, kind Sir, if there are "nice, easy ways" of getting people well, why should not the people have the benefit? Homoeopathy is a nice, easy way and the statistics of a hundred years show that it is more efficacious than your harsher way, yet you would have none of it did not the public intervene. Learn wisdom, brother!

In reply, we would like to have it distinctly understood that while we have many homeopathic friends and have always had a high regard for Hahnemann—with due allowances for the times in which he lived—we do not know any allopaths and would have a club for them if there were any. This is not merely a quibble of words. If there were a medical sect upholding the notion of giving big doses, of giving drugs whose symptoms should be directly opposite to those of the patient, we should oppose that sect much more than we ever have homoeopaths, for such a sect would do damage in a very direct manner. Our original article had no reference to homoeopathy at all. We as editor or practitioner, are always looking for "nice easy ways" of getting people well and think we know quite a number but we regard the "getting well" as more important than the "nice and easy."

The writer has been vaccinated himself once successfully and two or three times unsuccessfully, to insure protection. He has vaccinated several thousand others and has never seen but one case in which it could not be regarded as "nice and easy." That case was a dirty little girl at school and she had a sore arm but nothing alarming. Why the *Envoy* should object to vaccination, we can not understand. It conforms in everything but detail to Hahnemann's conception of the itchmite as a factor of disease. This conception, as an eighteenth century precursory hypothesis of the micro-organismic origin of disease, is a wonderful indication of Hahnemann's scientific imagination and logic. As a literal dictum it is absolutely contrary to demonstrated fact. Vaccination is in conformity with the general conception of "proving" a remedial agent. It is strictly though broadly in accordance with the idea that "similia similibus curantur." The methods of producing vaccine correspond closely to the ideas of developing potency by successive inoculations and dilutions and to that of "grafts." It is quite in line with the use of tears, pus, discharges, etc., listed by homoeopathic firms within recent years, if not up

to the present. And, best of all, vaccination has proved its success to the great majority of expert investigators and students of statistics.

The *British and Colonial Druggist* of June 7, 1912, continues the "Post Graduate" lectures of the Pharmaceutical Society of Great Britain. This course of lectures is of high scientific value and the gratitude of both the British and other pharmacists and physicians is due to Mr. S. W. Fairchild of New York City, for donating the funds necessary to secure it. The first lecture was given by Sir A. W. Tilden, the next two by Prof. W. H. Perkin and the fourth and fifth by John C. Umney, the President-elect of the British Pharmaceutic Conference.

PERSONALS.

Dr. A. L. Benedict announces the removal of his professional office as well as the headquarters of the BUFFALO MEDICAL JOURNAL, from 354 Franklin St. to the Frontenac, corner of Elmwood Ave. and Summer St., Buffalo.

Major John D. Howland, M. D., Captain E. L. Beebe, M. D., First Lt. Arthur C. Schaefer, M. D., and Capt. J. M. O'Gorman (the last named being one of our advertisers) were detailed from Buffalo National Guardsmen for service at the Connecticut manoeuvres in August.

Dr. J. J. Finerty of Buffalo, was in Detroit early in August.

Dr. E. P. Reimann of Buffalo spent a couple of weeks at Honey Harbor in August.

Dr. George F. Cott of Buffalo, attended the International Otological Congress in Boston in August.

Dr. Eli H. Long of Buffalo, was at Chautauqua about the first of August.

Dr. C. S. Lattin of Buffalo, was visited by burglars early in August. The stolen property was recovered from pawn shops.

Dr. H. D. Walker of Buffalo, has moved from 915 Main St. to 141 Elmwood Ave.

Dr. Benjamin Jacobson of Buffalo, has located at 1270 E. Ferry St.

Dr. James P. Barr of 1366 Broadway, Buffalo, has had a second misfortune. While convalescent from the fracture of several ribs in an automobile accident, his house was damaged by fire but without serious loss.

Dr. U. B. Stein of Buffalo, spent some time at Fall River, Mass., about the first of August.

Dr. Wm. M. Mehl and Dr. Edward H. Mehl of Buffalo, sailed for Vienna, Aug. 2, on the Kaiser Wilhelm der Grosse.

Dr. Marie Ross Wolcott spent the summer traveling in Canada.

Dr. William M. Decker of Buffalo, spent August at E. Aurora.

Dr. J. Hudson Grant of Albany, formerly of Buffalo, spent August at Revere Beach near Boston.

Dr. George A. Himmelsbach of Buffalo, left about the middle of August for a short European trip.

Dr. F. A. Kittinger of Lockport, returned in August from Nova Scotia.

Dr. Regina Flood Keys of Buffalo, expects to leave home next month for a tour around the world.

Dr. Mabel Flood who graduated at the University of Buffalo in 1911, has begun practice with her uncle, Dr. Henry Flood, at 401 Lake St., Elmira.

Dr. William Brady of Elmira, visited his parents in Canandaigua, about Aug. 1.

Dr. Matthew D. Mann of Buffalo, spent August in the Adirondacks.

Dr. Joseph Brennan and Dr. Louis Hengerer, former Buffalonians, now of New York City, visited in Buffalo during August.

The house of Dr. J. F. MacPherson of N. Tonawanda, was entered by burglars in the night of Aug. 6-7, while the family were absent from home, Dr. MacPherson having been called to Grimsby, Ont., on account of the serious sickness of his brother. Grimsby is having a typhoid epidemic.

Dr. Myrtle A. Hoag announces the removal of her office from 353 Dearborn St. to 892 West Ave., near Ferry St., Buffalo.

Dr. L. G. Hanley of Buffalo, has returned from a month's vacation at his summer home, Woodmont, Ct., and Norfolk, Va.

Dr. Alfred Hull Clarke of Buffalo, returned Aug. 1 from a vacation of several weeks at Lake View.

Dr. C. T. Crance and Dr. C. W. Clendenan of N. Tonawanda, had a ten-day automobile trip to Crooked Lake, late in July

Dr. Jacob Goldberg of Buffalo moved early this summer to 486 Elmwood Ave.

Dr. F. C. Busch of Buffalo, sails for Europe Sept. 7, for six months study. Dr. F. C. Pratt will occupy Dr. Busch's residence, on Irving Place.

Dr. James W. Charters of Buffalo, made an extended automobile tour through the Thousand Island country and to Ottawa, late in July.

Dr. L. H. Staples of Buffalo, spent two weeks on Georgian Bay in July.

Dr. William F. Jacobs of Buffalo, was at Lake of Bays for a fortnight in July.

Dr. William E. Fogle of Corning was thrown off a street car on July 25, receiving a concussion of the brain. He has been reported as recovering.

Dr. Harrison Betts of New York City, visited his old home in Buffalo this summer.

Dr. Chauncey P. Smith of Buffalo, traveled in northern Canada during August.

Dr. John F. Fairbairn of Buffalo, arrived at Montreal from England, Aug. 11, and proceeded to Boston to attend the meeting of the International Otological Congress, before returning to Buffalo.

Dr. and Mrs. Montgomery E. Leary of Rochester, have just returned from the Bermudas.

Dr. and Mrs. F. B. Maynard of Rochester, have returned from a trip to the Massachusetts coast.

Dr. W. M. Brown of Rochester, is on a trip camping in Northern Canada.

Dr. L. R. Corman has removed his residence to 1140 Park Ave., Rochester. His office is still at 209 Alexander St.

Dr. W. A. Keegan of Rochester, has removed his office from Clinton Ave., South, to Alexander St., corner of Park Ave.

Dr. John A. Stapleton has just purchased a house in Alexander St., Rochester.

Dr. S. W. Bradstreet has also purchased a house in Alexander St., Rochester.

Dr. M. B. Palmer of Rochester, is back from a short vacation.

Dr. William F. French, Rochester, has returned from an automobile trip to Chicago and return.

Dr. W. G. Orchard, Rochester is now occupying his new house in Linden Street.

Dr. A. S. Knight, Rochester, has returned from a fishing trip in Canada.

Dr. E. B. Angell of Rochester, is away on a vacation in Northern Canada.

Dr. C. R. Barber, Rochester, has returned from an automobile tour.

Dr. H. M. Imboden, formerly of Clifton Springs Sanitarium and recently of Rochester, has removed to 480 Park Ave., New York.

Dr. W. H. Woodbury of Buffalo, is spending the summer in European travel and has mailed to his friends several picture postal cards of views taken by himself.

Dr. F. A. Helwig of Akron, has been elected President of the Akron Board of Education.

Dr. Alfred B. Wright of Buffalo, has returned from a summer spent in camp in the mountains and will occupy his new home at 12 Chatham Ave., Nye Park.

Dr. Harry R. Trick of Buffalo, has just returned from a two weeks trip up the lakes and to Rochester, Minn., having acquired information and lost no organs.

Dr. F. A. Wollschlaeger of Buffalo, spent part of July and August in Canada.

Dr. Dewitt H. Sherman of Buffalo, motored along the New England coast and proceeded via Yarmouth to Nova Scotia, in August.

Dr. M. Allen Richter of Buffalo, spent the latter part of August in Maple Leaf, Mich.

Dr. Francis M. O'Gorman of Buffalo has moved to his new home, 92 Blaine Ave.

Dr. George J. Saylin of Buffalo, is completing a new residence and office on Spring St.

Dr. William Ward Plummer of Buffalo, returned Aug 17, from a six weeks' trip through Yellowstone Park and the west.

Dr. C. Spencer Kinney of the Easton (Pa.) Sanitarium, has been appointed Chief of the Consulting Staff on Mental and Nervous Diseases, to the State Homoeopathic Hospital at Middletown, N. Y.

OBITUARIES.

Dr. John Jay Taylor of Philadelphia, Medico-Chirurgical, 1887, died at Ocean City, N. J., Aug. 1, after a long illness, aged 59. He was a member of the A. M. A. and its component local organizations and of the American Medical Editors' Association. Since graduation, he had devoted himself to medical literary work, at first on the staff of the *Medical World*, later as chief editor of the *Medical Council*. Our acquaintance began at Philadelphia in 1897, when we were associate editor of the old *Philadelphia Medical and Surgical Reporter* and our last meeting was at Atlantic City, in June, 1912. Dr. Taylor was a man who endeared himself to all.

Dr. William Hopkins Prudden, Buffalo, 1905, a resident of N. Y. City, died at the Roosevelt Hospital, July 24, aged 30, after an operation for acute appendicitis.

Dr. Maurice Howe Richardson of Boston, Harvard, A. B., 1873, M. D., 1877, was found dead in bed at home, July 31, aged 60. His work in surgery was of the highest rank and he was one of the contributors to Park's and Dennis's systems.

Miss Margaret B. Bowden was found drowned in Niagara River, Aug. 5, 1912. For some time, and especially for the last year, she had been in bad health, with marked nervous prostration. She was a member of an old New England family but had resided in Buffalo for many years. At the time of her death, she was in her sixtieth year. For nearly a quarter of a century, Miss Bowden had served as secretary to the late Col. W. W. Potter, M. D., the former editor of this JOURNAL. As Dr. Potter's health declined, the active work of the JOURNAL fell more and more to Miss Bowden and for some months after his death, she was the sole proprietor, manager and editor, save for the voluntary assistance in strictly medical details, of several friends. On account of her modesty, few except these collaborators knew of the extent of her duties or realized her marked ability not only as a business woman but as a judge of strictly medical literature. Without technical instruction, she had gradually acquired a familiarity with medical journalism and was both a fluent writer and a wise critic of submitted articles. Last summer, we repeatedly urged Miss Bowden to continue in charge of the JOURNAL with such professional assistance as was volunteered but she realized her bodily and mental fatigue and refused. After this refusal, we urged that she should continue in active charge at least of the business details but were forced to yield to her firm resolution to retire completely from the work. She would not, while living, permit a tribute to be paid to her splendid executive and literary ability, her courage and devotion in carrying on the JOURNAL in the interim between editorships, and the sacrifice of health and strength which the labor involved. We feel this acknowledgement of her services to the profession of Western New York, though perhaps contrary to her own wishes, is demanded as a matter of honesty.

Dr. T. B. McClintic of the U. S. Marine Hospital and Public Health Service, died Aug. 13, at Washington, D. C., aged 39. He was born in Warm Springs, Va., graduated in medicine at the University of Virginia and appointed to the service, 15 years

ago. For the last two years, he had been studying the Rocky Mountain Spotted Fever, first well known through the researches of Chowning and Wilson, who traced its transmission to a squirrel tick. Dr. McClintic had labored especially in the Bitter Root valley and so successfully that no case of the fever had occurred this year until he himself developed symptoms on Aug. 9, and started for Washington, typic signs appearing en route. Mere words are inadequate praise for a martyr. In the past, there has been a tendency on the part of a few narrow minded army and naval officers to sneer at the Marine officers as civilians but this feeling has almost entirely disappeared and, indeed, even in the army and the navy, the risks especially of medical officers, are constant and not dependent on the presence of war.

Dr. Frank T. Cochran, Jefferson, 1872, died at Hudson, N. Y., July 17, aged 60.

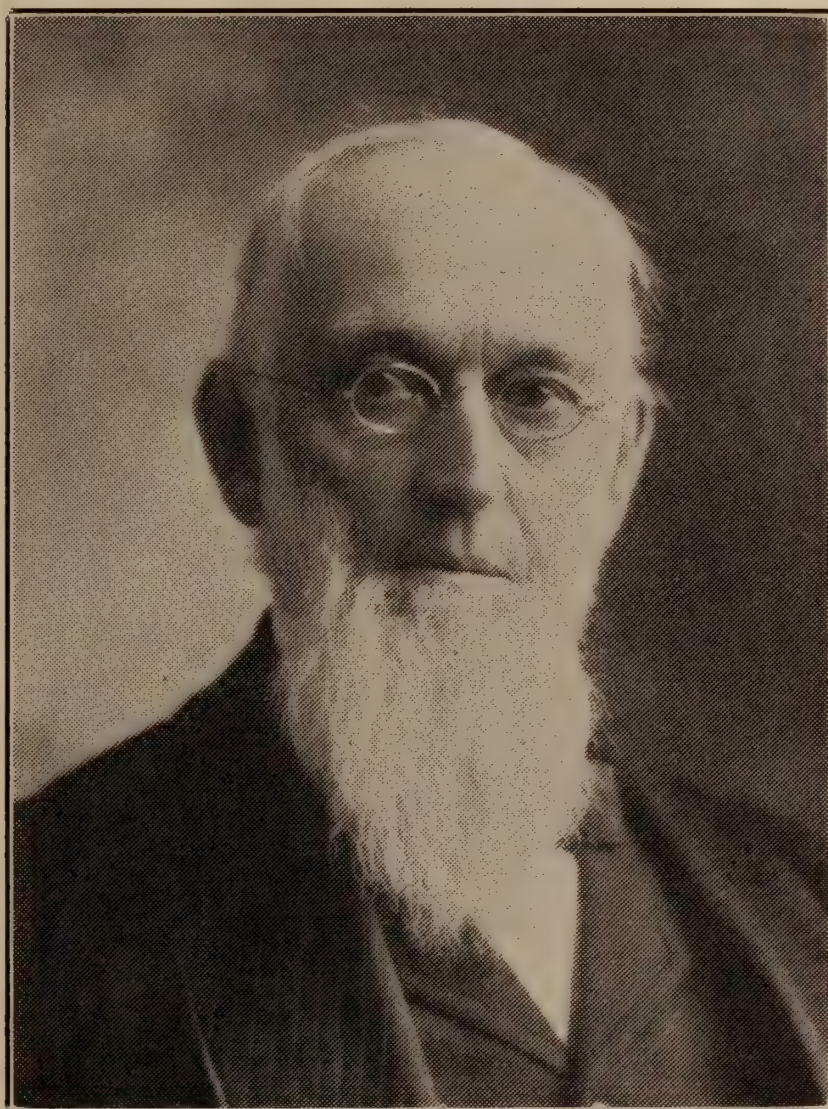
Dr. Delos Burd Manchester, died at Schenevus, N. Y., July 21, aged 54. He was a graduate of Buffalo, 1883. For many years he practiced at Oneonta, N. Y., later at Grant's Pass, Ore.

Dr. Alfred M. Haight of White Plains, N. Y., a graduate of the N. Y. Homoeopathic Medical College and Hospital, 1879, died suddenly of heart disease at Ocean Grove, N. J., July 14, aged 56. He was a member of the American Institute of Homoeopathy and of the State and County organization and was attending physician to the White Plains Hospital and Jennie Clarkson Orphans' Home.

Dr. Frederick F. Hoyer of Tonawanda, a graduate of the University of Buffalo, 1849, died Aug. 16, 1912, aged 91.

Dr. Hoyer's great, great grandfather was Peter Hoyer, who migrated from Hesse Cassel in 1748 and located in Herkimer. Dr. Hoyer was born at the family home in Warren (originally known as Andreastown), Herkimer Co., N. Y., May 9, 1822. After a course of medicine at the old Geneva Medical College, he practiced by license, in accordance with the existing custom and law, with his uncle, Dr. Peter P. Murphy of Royalton. In October, 1846, he married Miss Pauline Towne of Royalton who died in 1910, aged 87. After marriage he continued his medical studies and received the doctor's degree at the University of Buffalo in 1849. On May 9, 1849, he and his wife moved to Tonawanda by canal boat, built their home there in 1853, and resided there till their death. From 1861 to 1863, he was visiting physician to the Erie Co. Almshouse. In 1880 he was President of the

Medical Society of the County of Erie. In 1908, he was made an honorary member. Dr. Hoyer was the oldest mason in the state, having joined Lake Erie Commandery (of which his uncle was one of the three founders) in 1857. For several years, his masonic brethren honored him by calling in a body at his home. Dr. Hoyer, beside enduring the hardships of pioneer practice, common to his time, had the experience of two epidemics of cholera Asiatica and of numerous conflicts with small pox. He



DR. FREDERICK F. HOYER.

Plate Kindly Loaned by *Buffalo Express*.

was a strong man, physically, mentally and spiritually; rightly honored and respected by his patients, to the third and fourth generation, by his profession, by his fellow citizens.

Dr. Daniel Gaylord Mason, who had practiced in East Henrietta, Monroe Co., N. Y., for 28 years, died at his home, Aug. 13, aged 57. He was born in Walforth, Wayne Co., N. Y., July 9, 1855. He graduated in medicine, in 1879 at the New York University. Several years ago, he became infected during an

operation and his health gradually declined, although he made a gallant fight for recovery and persisted in his medical duties till recently. He was a member of the State Society and the Monroe Co. branch, of the Central N. Y. Medical Association, and a charter member of the Rochester Academy of Medicine. He was formerly President of the Medical Society of the County of Monroe.

BOOK REVIEWS

AN ESSAY ON HASHEESH, Including Observations and Experiments, by *Victor Robinson* of New York, published by the Medical Review of Reviews, 80 pages, 50 cents.

This is a most interesting review of the historic and literary aspects of the drug and it contains valuable contributions to symptomatology, with a very sensible reminder that idiosyncrasy has much to do with determining the exact disturbances noted.

In passing, we may say that we have never observed the confusion of time and space so eloquently described by H. C. Wood and that the sole toxic symptom (obtained in the transition from the ordinary preparations to one of real activity) noted has been a fear of death, without any definite subjective suffering or objective indication of depression of any function to warrant the fear. 25 cents.

OBSTETRIC CHARTS IN COLORS. Battle & Co., St. Louis. 25 cents.

In all, 37 figures are given, classified from normal labor to the most difficult obstetric manipulations, semi-diagrammatic, so as to center the attention upon the mechanics of labor and of correcting interference. Reference to these charts will refresh the memory of the practitioner and they would be of the utmost value in the instruction of midwives, nurses and medical students. A very brief, straightforward description, with formulæ, of the preparations of the firm, concludes the book.

PELLAGRA, An American Problem, by *George M. Niles, M. D.*, Atlanta; published by W. B. Saunders Co., Philadelphia, 253 pages, illustrated, \$3.00.

This is an exhaustive study by one who has had large opportunity for observing cases and patience and good judgment in reviewing the work of others. No definite conclusion is reached as to the etiology, although the author commits himself definitely to the conception of the disease as an entity, with which view, we have as definitely disagreed. The practical discussion of symptoms, diagnosis, prognosis and treatment is full and excellent, though obviously, from the point of view of the reviewer, diagnosis consists only in meeting the requirements of a somewhat

arbitrary definition and prognosis, prophylaxis and treatment, not limited by the idea that we have a definite disease process, are different in some respects from the same methods applied to what is regarded as a specific disease.

LABORATORY METHODS, with Special Reference to the Needs of the General Practitioner, by *Drs. B. G. R. and E. G. C. Williams*, with an introduction by *Dr. Victor C. Vaughan*. Published by the C. V. Mosby Co., St. Louis, 203 pages, 42 illustrations, \$2.00.

This book makes no pretensions of covering the field of clinical diagnosis but it does deal not only with the various fluids of the body but with methods of cutting and staining tissues, examining for poisons, post mortem technic and the general equipment of a simple laboratory. It does well, what it sets out to do.

TUMORS OF THE JAWS, by *Dr. Charles L. Scudder*, Boston. Published by the W. B. Saunders Co., Philadelphia. 391 pages, 353 illustrations, cloth, \$6.00, half morocco, \$7.50.

Elaborate monographs on particular fields of non-visceral surgery, of which the same author's work on Fractures, recently reviewed, is another good example, show how far specialization has advanced. But even for the general surgeon, a work of this kind is more convenient for reference than the brief chapters of several more comprehensive text books and, from the mere financial standpoint, one case in prospect would amply justify the purchase and perusal of the book. Not only is there a complete discussion of general principles and a grotesquely horrible collection of extreme cases, but technic is both described and illustrated with the utmost detail.

A TEXT BOOK OF GYNECOLOGY, by *Dr. William Sisson Gardner*, Baltimore; published by D. Appleton & Co. 286 pages, 138 illustrations. \$3.00.

This is a very concise, systematic treatise which avoids minutiae and gives a good general idea of the subject. It is, however, sufficiently full for all but the experienced specialist seeking the perfection of details.

GOULD AND PYLE'S CYCLOPEDIA OF PRACTICAL MEDICINE AND SURGERY. Second edition, revised and enlarged, under the editorship of *R. J. E. Scott, M. A., B. C. L., M. D.*, New York. 2 volumes, 653 illustrations. \$14.00.

The work represents a large number of collaborators, 33 more than for the first edition and 400 pages have been added. Several very recent subjects are included. This work impresses us as being of the greatest practical value. George M. Gould has the knack of systematizing information, lighting on illustrative types,

and condensing facts into tables. In this work he has been ably seconded by Walter L. Pyle. R. J. E. Scott has taken up the work and extended and revised it. For economic reasons, a cyclopedia of medicine or any other science or technical art should not represent too much invested capital nor too much requirement of time in research since, in any event, it cannot reach the maximum required of an elaborate special treatise nor can it be permanent. On the other hand, it should be more elaborate than a dictionary whose function is merely to define words and to give a general idea of what they mean—which a formal definition usually does not do. In our opinion, this cyclopedia has struck the proper medium of size, scope and expense.

DISEASES OF THE GENITO-URINARY ORGANS AND THE KIDNEY, by *Robert Holmes Greene, A. M., M. D.*, and *Harlow Brooks, M. D.*, New York; published by the W. B. Saunders Co., Philadelphia. 3d edition, revised and enlarged, 639 pages, 339 illustrations, many of them being full page plates. \$5.00.

This is a standard work, complete in its scope, already possessing the confidence of the profession. The revision brings it up to date. It would be useless to single out any part of the work for special comment.

DUODENAL ULCER. *B. G. A. Moynihan, M. S., F. R. C. S.*, Leeds, Eng., published by W. B. Saunders Co., Philadelphia, second enlarged edition, 486 pages, illustrated, cloth, \$5.00, half morocco, \$6.50.

Moynihan is one of the few great authorities on this subject. Speaking with an operative experience with 168 cases, he has had the following results:

Died as result of operation,	4	2.14%
Died of other causes	4	2.14%
Cured	148	79.14%
Improved	18	9.6 %
Doubtful, no better or not traced	13	6.9 %

He very frankly states that he was at first led by reports of internists to regard hyperchlorhydria as definitely diagnostic but he has modified his view as actual examination has shown it to be present in only 40% of cases. There are few conditions about which such glittering and foolish generalizations have been made, as hyperchlorhydria. It is not a very common condition, statistically, and is mimicked by various other conditions. It may, apparently, be an organic disease of itself but it is also symptomatic of many causes of irritation. While the work is mainly surgical, Moynihan views the problems broadly and his book is perhaps of greatest service to the medical practitioner, in whose hands the primary diagnosis and decision as to treatment, mainly rest.

PELLAGRA, by *Stewart R. Roberts, S. M., M. D.*, Atlanta. Published by the C. V. Mosby Co., St. Louis. 272 pages, 90 illustrations, \$2.50.

The author has presented practically all that is known on the subject, in a systematic way and apparently without bias. He does not consider any theory as definitely proved. In particular, he opposes the time-honored corn theory and that of Mizell as to non-drying oils. While he shows that the simulum theory of conveyance is not proved, he apparently leans toward the existence of a specific organism. In a series of twenty cases, free HCl in the gastric contents was lacking in 14 and present in normal proportion in 6 (although it must be admitted that some who very easily discover hyperchlorhydria might make this diagnosis on an acidity of 30—38 degrees.) The fæces of this whole series were stated to contain nothing not found in ordinary diarrhœa and dysentery. An allusion to indican might be of interest.

There is one point in his logic as to etiology which deserves criticism: "It cannot be produced by the poisons of both corn and protozoa." The flaw in the logic is that there may be an etiologic factor in the case of any disease which is predisposing or even necessarily cooperative with a specific infecting organism. For instance, in yellow fever, the stegomyia is not the specific cause but is practically, the determining one. In tetanus the nature of the wound in determining anærobic conditions, is practically necessary to the infectivity of the bacillus mallei. In tuberculosis for practical prophylactic and therapeutic purposes, we have got back to the old nutritive and hygienic theories of disease notwithstanding the demonstration of the bacillus. As previously stated, we do not personally regard pellagra as a specific disease at all and we hold no brief for the corn theory but it is not impossible that corn or any other article of diet or some other factor may be an essential predisposition to the implantation of a specific organism.

KIDNEY DISEASES, by *W. P. Herringham, M. D., F. R. C. P.*, with chapters on Renal Diseases in Pregnancy, by *Herbert Williams, M. D., F. R. C. P.*, London. Oxford Press. 378 pages, 30 illustrations, \$5.50.

It should be distinctly understood that this book is not one on urinary analysis, although such methods are necessarily included and there is an especially interesting chapter on albumin. It discusses broadly, kidney diseases, including anomalies, movable kidney, the relation to cardio-vascular disease, eclampsia and many other topics. We would derive more benefit from the chemic and microscopic study of the urine if more of us read this book and if we considered the kidney as something more than an excretor of material for examination.

TUBERCULIN TREATMENT by *Clive Riviere, M. D., F. R. C. P.*, and *Egbert Morland, M. B. and B. Sc.*, the former of London, the latter of Arosa, Switzerland. The Oxford Press. 277 pages, with charts, \$2.00.

While admitting the existence of human and bovine varieties, the authors consider these to be essentially identical and hence that there is no priori absurdity in using bovine tuberculin for human tuberculosis, or vice versa, in fact they consider that, at present, the choice should be according to empiric results. The statements are conservative yet favor strongly the use of tuberculin, especially in closed cases. A great many technical details deserve attention yet would lead to too lengthy a review. While we would not admit that American authors on this subject have been unduly biased by personal enthusiasm, this book representing experience in two other countries, with the elimination of local social and other features, is corroborative and of value to the American physician, on account of the independent viewpoint of the authors.

GONOCOCCAL INFECTIONS, by *Major C. E. Pollock* and *Major L. W. Harrison* of the Royal (British) Army Medical Corps. Oxford University Press, 222 pages, unillustrated, \$2.00.

While the word gonorrhœa was coined under a false impression of its nature, the word signifying a flow of sperm, and the name gonococcus is correspondingly inaccurate, both are, nevertheless, Greek and the proper adjective is *gonococcic* and not *gonococcal*. However, the meaning is clear and the book is excellent. The authors devote considerable space to the vaccine treatment, agreeing that a good stock vaccine is all right. The chapter on gonococcic septicæmia is also especially valuable.

LANDMARKS AND SURFACE MARKINGS OF THE HUMAN BODY. *L. Bathe Rawling, M. B., B. C., F. R. C. S.*, London. Published by Paul B. Hoeber, 69 E. 59th St., N. Y., 96 pages, 29 plates, \$2.00.

Some of the illustrations are photographic with added markings, some colored diagrams, most are full page, a few half page in size. All are clear. The text is arranged systematically and is much more complete than corresponding portions of standard anatomies. An appendix gives the length of various passages, tubes, etc. It is difficult to explain in a brief review just how the author has woven in a mass of interesting and practical information that renders his work of value to the general practitioner and not merely to the anatomist and operator. It may not be out of place to compliment the publisher both on the high grade of the book from the mechanic side and on his skill in selecting authors who have something out of the ordinary to present to readers.

BUFFALO MEDICAL JOURNAL

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OCTOBER, 1912

No. 3

Immunity

With Reference to Some of Its Relations to Surgery

Being the Harrington Lectures before the Alumni Association of the University of Buffalo, May 29 and 30, 1912.

By LUDVIG HEKTOEN, M. D.

Director of the Memorial Institute for Infectious Diseases
Chicago

(Continued from last month.)

THE FORMATION OF ANTIBODIES UNDER VARIOUS CONDITIONS.

By measurement of antibodies as they appear in the blood after the introduction of antigens, much has been learned of the manner of antibody formation, and the most important facts bearing on this point are shown in the antibody curve. The simplest curve, that obtained after one injection of antigen in a normal animal, shows that for two to three or four days, there is, as a rule, either no change or there may be a fall in the specific antibody if such is already present. At the end of this period of latency new antibody appears. This increases until an acme is reached, which in most cases seems to be about the 10th or 12th day; before long begins the last phase of the curve, namely a gradual return to normal, which may last only a few days or several weeks and even much longer.

Animals, including man, normally carry in the blood small amounts of a large number of antibodies, which possess specific affinities for antigenic substances and which probably do not differ much from the corresponding bodies that arise on immunization. In favor of this conclusion is the fact that the primary fall in antibody in the blood on immunization is specific, that is, affects only the antibodies for the particular antigen injected. This fall, which occurs also on reinjection in previously immunized animals, is regarded as the result of neutralization of the existing antibodies, although the amount of antigen introduced often seems too small to cause the fall in this way.

The height and duration of the simple curve vary depending on the kind and amount of antigen as well as on the place of introduction, and also, of course, on the individual animal. It is important to note that the yield of antibodies does not increase in the same ratio as the antigen is increased. Small amounts of bacteria and other antigens may cause more antibody to form

on intravenous than on subcutaneous injection. In animals previously acted on by an antigen, the antibody mechanism may be especially sensitive to that antigen and respond more promptly and fully than in the fresh animal. In this way is explained the quick rise of opsonin, often seen on therapeutic injections of vaccines in chronic infectious conditions, as well as other phenomena of allergy which I shall discuss a little later.

When many injections of antigen are given at intervals more or less variations of the simple curve result. It is the rule in immunization with toxins and bacteria to begin with small quantities and to reinject with increasing quantities, carefully graded to avoid severe reactions, at intervals of a few days for a considerable period. A continued and more or less cumulative production of antibodies may be induced also by daily injections of small and constant doses of antigen. In some cases, however, it seems difficult to secure marked cumulative effects. Animals under the continuous influence of antigens eventually lose the power to produce antibodies, to regain it, if at all, only after periods of rest.

A cellular antigen, like bacteria or other cells, may give rise to lysin, agglutinin, opsonin, and other antibodies at the same time. In some cases these different antibodies appear to describe parallel curves; in other cases, there is no such parallelism which would seem to indicate that we are dealing with distinct substances.

When several antigens are introduced at the same time, as occurs in secondary and multiple infection, the amount of antibody produced for a particular antigen probably is less than when that antigen alone is introduced. Secondary infections in typhoid fever, such as pneumonia, depress the agglutinin curve. In dogs pneumonic infection (distemper?) may suspend almost completely the production of antibodies for foreign corpuscles. It would seem from this that the same mechanism is concerned in the production of all antibodies as it probably would be different if wholly distinct cell groups were charged with the production of different antibodies. The observations suggest also that the streptococcus and other infections of eruptive diseases, notably small-pox and scarlet fever, and of tuberculosis, may depend in a measure on the inability of the body to respond freely to the stimulus of more than one antigen at a time; and the aggravation of the primary disease, e. g. tuberculosis, as secondary infection sets in, may be due to depression in the production of antibodies for the primary disease, as illustrated by the suspension of the tuberculin reaction by an attack of measles. Here we may assume with v. Pirquet that the measles

antigen suspends the formation of the bodies that cause the tuberculin reaction. Other explanations of these phenomena might be advanced.

In his classical experiments on immunity through inheritance and nursing, Ehrlich showed that certain antitoxins pass over into the milk, and since then antibodies have been found to occur also in transudates and other fluids. Normal antibodies are more concentrated in the blood than in the lymph; traces only occur in the cerebrospinal and pericardial fluids and aqueous humor. The results of Dr. Carlson and myself show that so far as the blood and lymph are concerned the changes in concentration during active immunization of dogs with foreign blood run practically parallel, the concentration in the lymph being always somewhat lower than in the blood. In dogs transfused with blood of dogs actively immunized the antibodies rapidly reach the same relative concentration as in normal and actively immune animals. In inflammatory exudates the antibody concentration may approximate that of the blood.

As you know a local increase of antibodies may be secured by artificial hyperemia which is producible by various methods such as mechanical passive congestion as practised by Bier, by poultices, by hot air apparatus, by compresses, etc. Any of these methods may do harm unless carefully regulated so as to avoid stasis thereby leading to nutritional disturbances and preventing the free and continuous access of antibodies to the infected area.

WHERE ARE ANTIBODIES FORMED?

It has been found that after injection of antigens, the spleen, bone-marrow, and lymph nodes show increase of antibodies before the blood which, however, soon gains more and more while the tissues mentioned gain relatively less. The most natural conclusion would seem to be that the antibodies are formed in the blood-making organs, and the results of splenectomy certainly favor this view as it is followed by a lower but typical curve if made shortly before or shortly after the injection of the antigen. Experiments also show that the spleen binds antigen; the injection of splenic pulp from an animal injected with antigen into a fresh animal gives new antibody formation. Loss of blood increases the output of antibodies and this also points to the blood-making organs as their source.

It is claimed that antibodies are produced by tissues at whatever place the antigen is introduced, but there is no convincing experimental evidence that such is the case. No matter how or where antigen is introduced, antibodies appear in the blood whence they rapidly make their way into lymph and other fluids

and it is consequently impossible to learn whether antibodies in an exudate are produced by the adjacent tissue. Whether antibodies are produced in the blood itself by leukocytes is also under discussion. Now, if they are formed by and in the blood, it would be reasonable to seek them in animals freely transfused with the blood of animals given an optimum dose of antigen a short time before, but in experiments of this kind on dogs Dr. Carlson and I found that no antibody formed in the transfused animals, the antigen very quickly being fixed by tissues or removed from the blood in some way, and the blood evidently takes no direct part in actual manufacture of antibodies.

Judging from experiments on dogs the function of antibody production is not easily upset by various surgical procedures. Removal of the pancreas, of the stomach, of large parts of the small intestines, and various other operations as well as prolonged anesthesia with ether, do not affect seriously the output of antibodies in animals so treated and shortly afterward injected with foreign blood intravenously. It seems as if the mechanisms for the production of antibodies are firmly established and well protected against certain disturbances. In this connection reference may be made to the interesting observations of Graham to the effect that ether, when given for anesthetic purposes, probably by virtue of its fat-dissolving power, greatly reduces the normal phagocytic power of the blood with respect to streptococci, pneumococci, staphylococci, colon and typhoid bacilli. The ether acts both on the leukocytes and the opsonin, and while it is not possible to prove that ether anesthesia predisposes to infection on account of this action it certainly lies near at hand to believe that such might be the case. Graham also finds that lecithin and olive oil suspend the antiphagocytic effect of ether in the test-tube and that administration of olive oil exercises an inhibiting action in vivo at the same time as it prevents in large measure post-anesthetic nausea and vomiting. On account of their fat-solvent powers, chloroform and alcohol may be assumed to have the same or similar effects as ether.

THE ANTIBODIES IN DISEASE.

In acute bacterial diseases the course of the antibodies that develop in the acute attack resembles altogether that of the antibody curve after a single injection of antigen in a normal animal. This holds good for pneumonia, for erysipelas, for diphtheria, for cholera, for the streptococcus opsonin in scarlet fever, etc. These curves show certain definite relations to the clinical phenomena: During the early stages there is a more or less distinct fall in the antibody; as the symptoms begin to subside the curve

risks and usually reaches the highest point a day or two after the acme of the symptoms. This curve is readily affected by complications at the onset of which it usually falls, and in rapidly fatal cases the curve may not return but sink lower and lower (pneumonia, cholera.)

A somewhat different type of curve is given by typhoid fever, at least so far as the agglutinin is concerned, which in most cases appears in the first or the early part of the second week, and usually reaches the height in the third week. In the long latency and late acme of the curve one is reminded more of the curve in animals receiving daily injections than of the curve after a single injection of antigen.

That the content of the blood in antibodies may be increased even in chronic infections is indicated very clearly by the power of the serum in syphilis, in gonococcic infections, and in other diseases also, to cause fixation of complement. The allergic reactions, i. e., the special reaction of the infected body to reintroduction of the substances causing the infection, and familiar to all in the form of the tuberculin reaction, are obtainable in an increasing number of chronic infectious processes; according to the current view as to their nature these reactions also depend on the action of new antibodies. Whether the failure for instance of the tuberculin reaction in late stages and generalized forms of tuberculosis is due to a lack of these bodies is not known. The estimations of the opsonic index show that in chronic infections, notably tuberculosis, the opsonin often seems to fall below normal, being however subject to fluctuations of such wide range as to be of diagnostic significance.

VACCINE THERAPY.

Inoculation or vaccine therapy rests on the belief that it is possible to increase the formation of antibodies in an infected organism by injecting the bacteria or virus, properly prepared, that cause the infection. Naturally the question arises why the bacteria already present are not stimulus enough. In the case of chronic, localized infections, in which vaccine therapy is used with most success, one answer is that the infecting germs are so enclosed and walled off that antigenic substances in sufficient quantities do not reach the centers of antibody formation. That this often is the case is shown by the fact that anything which promotes absorption from the focus of infection, such as artificial hyperemia, massage, and exercise, often causes an increase in the amount of specific opsonin. It has been claimed also that antibodies are produced locally and that consequently the injection of antigen on this account serves to throw new and

hitherto unused centers of production into activity. I have pointed out that experimentally it has not yet been possible to obtain any satisfactory evidence that there is any local production of antibodies outside of the bloodmaking organs and the lymph nodes. It seems to me that if it be proved that vaccine treatment as claimed by some really is effective in acute infections such as pneumonia, typhoid fever, puerperal septicemia, in which we may assume that there is abundant supply of antigen, then that effectiveness will have to be explained according to principles of which at present we have no clear conception.

In judging of the actual results of vaccine therapy in acute processes, physicians should bear in mind that it is difficult to prove the efficacy of any therapeutic method applied to diseases that are spontaneously curable and that it is impossible to estimate the real benefit of any treatment in such diseases without careful comparisons with a sufficient number of suitable control cases. That vaccine treatment of various chronic and recurrent localized infections may be of value cannot be doubted. Surely tuberculin carefully given promotes the cure of certain forms of chronic tuberculosis, and the literature is full of reports of excellent results from the use of specific vaccines in various forms of staphylococcosis (furunculosis, acne, sycosis). Good results are also obtainable in infections of the urinary tract, especially those caused by strains of the colon bacillus, although bacteria may persist after the subsidence of the active symptoms. Chronic streptococcus infections are also favorably influenced by vaccine treatment. There is such difference between various strains of colon bacilli and of streptococci that the use of vaccines that may be bought does not promise nearly as well as the use of vaccines prepared from the strains actually causing the infections. Weaver and Tunnick have found that in rabbits injection of streptococci killed by suspension in 25 per cent. galactose solution induced more or less protection from living streptococci and also a marked increase in the opsonin for streptococci, these effects being more marked than when streptococci killed by heat are used. In the subacute and chronic streptococcus infections in man the best results seem to be obtained by the injection of homologous cocci killed by indifferent chemical agents. All cases selected for vaccine treatment should receive close study; the precise etiological nature of the infection must be determined, and if possible, pure cultures should be obtained, from which the vaccine may be made. Encapsulated exudates and sinuses maintained by foreign bodies are not suitable for treatment by vaccines without the necessary surgical treatment. The indiscriminate use of "mixed vaccines" which is merely an-

other form of the ready-made, shotgun method is undesirable and unscientific.

I have selected as an illustration of the details of vaccine therapy the treatment of gonococcal infection by the injection of killed gonococci, which appears to have a certain amount of real value. Summarizing briefly the recorded experience, I would say that there is reason to doubt that inoculation has any effect in the typical gonorrhea of the adult, at least not in the acute forms; that in chronic gonococcal vulvovaginitis of young girls the treatment by inoculation in the opinion of those who have followed the results most closely is distinctly preferable to all kinds of local treatment, and that it probably shortens the duration of the discharge; that favorable results have been observed in cases of gonorrheal epididymitis and salpingitis; and finally that in chronic gonococcal arthritis and periostitis, the most stubborn of all gonorrheal complications, the frequency and peculiarities of which only recently have become fully understood, injections of killed gonococci may have a distinctly curative action, a conclusion in which practically all observers agree. As emphasized by Irons, too much must not be expected of this method by way of marvelous cures; its proper use is in conjunction with other general measures like rest, aspiration of joints distended with fluids, massage of the prostate, and other surgical and general hygienic treatment.

The material or vaccine used for inoculation consists of suspensions of gonococci in salt solution, the organisms having been killed by heating to 60° C. for one hour. The gonococci are obtained from cultures on ascites-agar or blood-agar on the surface of which they have been growing for 24-48 hours when they are washed off with small quantities of salt solution. While cultures from the lesions of the patient that is to be injected would seem to be preferable, it often is impossible or impracticable to obtain such cultures, and consequently strains from other sources may have to be used. Very often several different strains of gonococci are mixed into one "polyvalent vaccine." The suspensions are made so that fixed quantities contain definite numbers of gonococci, and the number injected at one time has varied from one to twenty millions in the case of children and from one to three thousand millions in the case of adults; speaking generally the initial dose in children should not exceed five and in adults twenty to fifty millions or so. The injections, which are given subcutaneously or intramuscularly are repeated at intervals of a few days, five to eight, and the number of gonococci injected may be increased gradually as warranted by the condition and reactions of the patient. At present general use is not made of the

gonococco-opsonic index as a guide to the frequency and size of the injections because it has been found that the clinical manifestations will suffice for that purpose. Experience indicates that in gonococcal arthritis and tubo-ovarian processes the quantity of vaccine injected should be large enough to cause a mild reaction marked by a slight rise of temperature, a little increase in the pain and tenderness of the lesions, and some malaise, lasting for about 24 hours.

THE SPECIFICITY OF ANTIGEN-ANTIBODY REACTIONS.

The word "specific" has been used many times in the foregoing, and as it is meant to designate a characteristic of the phenomena of immunity that is of fundamental importance it may be well briefly to make clear the significance of specific and specificity in immunology. It has been found that a given antibody has a very special affinity for the antigen calling it forth, so that its action, whatever that may be, is obtained in the most pronounced degree with that antigen, there being, as a rule, but little or at least less affinity for similar antigens of different species. This, in the briefest and most general sense, is what specific indicates in immunology, and practically all antibody-antigen reactions, both those that occur in the body and those that are observable in the test-tube, follow this law of specific action. It is true that when certain antibodies are richly developed the action may extend to the corresponding antigens from species more or less closely related to that from which is obtained the immunizing antigen, but nearly always in a much less intense degree than in case of the latter. The specificity of antibody-antigen reactions is dependent on the structure of the protein substances that we are dealing with; and it means that there are differences in the structure of similar proteins of different origin, that proteins of different species in most cases are not alike. It is very interesting that certain proteins of animal origin appear to have no specific relations to species. The most striking example of this kind, in fact the only example that is really well substantiated, is furnished by the crystalline lens: the protein of the lens of one species is not distinguishable from those of other species either by means of the precipitin or the anaphylactic reaction as positive reactions are obtainable under the same conditions with lens proteins of widely separated species and even with the lens of the species from which we obtain the immune serum or the sensitized animal. In this case the specificity depends on organ and not species. Whether other proteins, such as those of the sexual cells and of tumors, possess a similar organ-specificness is not determined.

It is the limitation of antibody action by species that gives diagnostic value to the serum reactions in infectious diseases. It is by virtue of this circumstance that agglutination of typhoid bacilli by the serum, in proper dilution, of a patient means typhoid infection; that the reaction to tuberculin means tuberculosis and to gonococci, gonococcal infection; and that the fixation of complement by the antibody-antigen compound has diagnostic significance. It is unnecessary to mention that the action of antitoxic and other therapeutic serums is strictly specific in this sense. If we wish to prevent any infectious disease by means of inoculation or vaccination we are forced by this law of specific action to inject the bacteria or virus, properly prepared, causing the particular infection we wish to prevent. This aspect of the specificness of infectious diseases was expressed clearly and forcibly by Fuller in 1780, when he wrote: "The pestilence (chicken-pox) can never breed small-pox, nor the small-pox the measles, nor they the crystal or chicken-pox, any more than a hen can breed a duck, a wolf a sheep, or a thistle figs, and *therefore one sort cannot be preservative against any other sort,*" and, I would add, in reference to inoculation or vaccine treatment, that generally speaking one sort cannot be curative of another sort. If we wish to increase the antibodies against gonococci in the hope thereby favorably to influence a chronic or subacute gonococcal process, we must inject gonococci, and it seems that in view of possible differences in various strains of gonococci, we may do best if we can inject gonococci from cultures of the very strain causing the infection we wish to treat. In all therapeutic inoculation, just as in preventive inoculation, we must inject the bacteria, causing the particular infection we wish to overcome; hence exact, etiologic diagnosis, in many cases possible only by isolation of the infecting germ, is an absolute prerequisite for successful inoculation.

Medical Versus Surgical Means of Diagnosis and Treatment of Gastrointestinal Diseases.

The Burning Question in Medicine.

BY ANTHONY BASSLER, M.D.
New York City

MARCUS Aurelius, the wisest of Roman Emperors, died in 180. Before then he wrote: "Remember that all is but opinion, and all opinion depends on the mind. Take thine opinion away, and then as a ship that hath stricken in and within the arms and mouth of the harbor, a present calm; all things safe and

steady; a bay not capable of any storms and tempests." XII, 16.

Accepting these words on opinion as true today, the situation in the subject considered tonight shows that we are still far at sea and to a great degree rolling tempestuously about. The internists and stomach specialists have had their opportunity for many years, and to great extent failed through omission. The surgeons have recently come forth, and also to a great extent failed but through commission. The general practitioners who man the deck and who have the deepest interest in the sick passengers, are all over it and nowhere at the same time according to the patient and as the consultants are inclined. At one time they are pro-surgical and rallying with the surgeon, and at another promedical and with the internist. Every general practitioner who has had enough experience with these difficult-to-fathom cases and been active in cooperative practice with them, will tell you of recent cases that he took to internists and stomach specialists and they failed him, and others which he delivered over to surgeons and they failed him too. In the same breath, he will relate apparently surgical cases in which he was glad that no operation had been done, and not a few in which he was thankful that it had been performed after having had long and bitter discouragement with the internist and stomach specialist. If my work was that of catering to a general family practice, on this subject, I would stand in the centre of the deck and huddle my patient up close beside me with both arms around him and keep perfectly still until my own reasoning directed me the way, or some diagnostician, whatever his classification, advancing reason and logic on the case would show me how to turn with him.

It is generally agreed that we are striving to bring practical medicine to a more definite basis, a mighty difficult, tedious and often discouraging thing to accomplish in only one of the myriad of details in this subject. In this, the surgeon who plays to the galleries in his rantings against stomach specialists accomplishes but little excepting selfish personal ends. To the few cases in a hundred of all chronic disorders manifesting symptoms in the abdomen he bases his wrath upon, the general practitioners, internists, stomach specialists, and even the surgeons themselves, see 95 that do not require operation. It is well enough for him to say to the stomach specialists "come into the operating room and learn of the criminal mistakes you have made," but the stomach specialists can truthfully say to him "come to my clinic and attend in my office and I will show you twenty cases with symptoms similar to the one you have operated upon that are getting well without operation."

The effect of these five per cent. of all cases, assisted as it is by the freedom of danger today in exploratory incisions, makes the surgeon radical in his views, and my observation has been that the less the surgeon knows and can accomplish, and for other personal reasons, the more radical he is. The time will never come when the majority of the people will submit to operation for diagnosis. Some of them will, but many times more feel that we know more about diagnosis than we really do, and will hesitate a long time, try different practitioners, and perhaps set their minds sternly against it. If you present them with a definite diagnosis, however, and this is an operative condition, the majority will submit early, but for exploratory incision, I suppose I voice the troubles of you all when I say that I have mine.

There are none, it is true, who deserve greater censure than that most numerous type of stomach specialist we have in the large cities today. As I view it, a stomach specialist must be a good general practitioner, an excellent internist, a consulting surgeon, a skilled laboratory man and radiographist, a neurologist, ophthalmologist and others, and be a dog for work on every case that comes to him, and this combination represents as rare a type of man as can be found in medicine anywhere. It is this ultraconservative, poor diagnostician type of stomach specialist who has temporized with the cases of chronic gastric and duodenal ulcer, gall stones, chronic appendicitis and others, and who does not make a diagnosis of gastric carcinoma until the growth is the size of a base-ball. I have often said, that the serious cases stand a better chance in the hands of good general practitioners of medicine than in his, although at times he may be brilliant with a few.

Good surgery of the abdomen is now only about seven years old. At first it was solely for therapeutic purposes, and of late it has become diagnostic also. For therapeutic purposes it was, is today, and always will be based right, for in proper cases it can do what medicine never will be able to. For diagnostic purposes as it is today, it is not based right and represents lack of medical knowledge, over ambition and deficiency of clinical work in fathoming cases. There are some cases which can only be diagnosed by that means, but these are decidedly fewer than are being operated upon today. Because of the bright results attained by surgery, the encouraging and sometimes questionable statistics, the therapeutic and I hope to a constantly growing less extent the diagnostic deficiencies of the internists and stomach specialists, the surgeons have been crowding the internists to the wall and offering operation as the alternative. In medicine, the

tendency of its leaders is to cover up mortality rates and mistakes, and only present the bright results. This is more true today of surgery than of medicine, because we rarely learn of the surgeon's error, and the patients live on for some time beyond that of the internists so that they can come to us. Since all sides have lost sight of the necessity for the existence of special diagnosticians in this field who straddle both the medical and surgical aspects of cases, and since we are more familiar with the deficiencies of our internists and stomach specialists in the past, let us consider what any one can see on the surgical side.

In the last five years, my associates and myself have examined in the clinics over six thousand cases giving symptoms referable to the abdomen. Ninety-one per cent. of these had had symptoms for six months or longer. Forty-three per cent. had been operated upon at some time in adult life for something. In fourteen per cent. laporatomy scars were visible, and in eleven per cent. these represented operations for some condition in which there had been abdominal symptoms. This eleven per cent. was made up by 570 cases. In 460 digestive symptoms persisted after the operation as before and many had grown worse after it. Of the 110 cases that were benefitted, 94 were operated upon after more or less definite diagnosis had been made, and in 86 the patients told of what was found or done. Of the 460 cases that **were** benefitted but very little, none at all, or made worse, the patients went on the table with suggestive degrees of definite diagnosis in only 73 cases. Leaving these out of consideration, we may say that needless exploratory incisions and operations were performed in 387 out of 460 cases, and, most interesting, very few of these patients knew anything about what was or was not found at operation. Putting the rate of mortality from exploratory incision and general anesthesia down to one and a half per cent., conservatively, six individuals have ceased to exist in the meantime. In these 387 cases, the operations were performed in 17 of the New York, Bronx and Brooklyn hospitals, and the great majority by the best men we have here in surgery today. I feel that the time has come to call a halt on operations to see if something may be found, rather than operations on some reasonable indications for them.

Knowing that surgery is not a "cure all" for stomach diseases as some of us would want all to believe, what have the major of these mistakes been due to? During the last years gastroenterostomy has become a common operation, and still the only conditions in which it is helpful are stenoses to the onward flow of chyme in the stomach and chronic duodenal ulcer, and these comprise but few of all cases that are seen. Even though it is true

that the duodenal ulcers are prone to chronicity from the start, why is it that at autopsies ten ulcers of the stomach are found to one of the duodenum, and that at operation more duodenal are met with than gastric? Is it only because they are not diagnosed, or do the majority of them heal at some time? I think that both are true, and wish to state that if more of them were diagnosed and treated by three weeks bed and diet and six months dieting afterward, that about one-fourth of all would heal which are today meeting with surgery therefor. Since four-fifths of all gastric ulcers are in the lesser curvature in the posterior wall of the stomach—a surgical inaccessible place—and since gastroenterostomy in a curative way is helpful in only a small proportion of them and partial gastrectomy is such a serious matter, should every chronic gastric ulcer be operated upon? This is a moot question, for most should be and others should not.

The strongest argument in favor of generous surgery is in the prevention and saving of life from malignant disease. According to some surgeons, old ulcers are the basis of this in the majority of instances. Careful autopsies on those who have died of malignant disease of the stomach do not prove this to be true. If carcinoma can develop in a gall-bladder which has no stones, the head of the pancreas which is well protected from trauma, in a uterus which is freely suspended and only the erosion of the cervix of which can be taken as a probable predisposing factor, in the distensile and simple mucous membrane of the rectum, and in the breast of virgins who have not even had a definite trauma, then we have a right to believe that it may develop in the stomach too without an ulcer having first been there. The usual step in the process of degeneration of epithelial tissue is hyperplastic before it becomes atrophic, and degeneration may take place from general as well as simple local causes. Such hyperplasia means small round cell infiltration, and if it were not for collection into carcinoma nests you could not tell the difference between the tissue of simple inflammation and malignant disease, for the cells of both look just alike. May not then such local inflammation in susceptible individuals, which can come from causes other than ulcer, continue in the cell proliferation with the development of malignant disease? I think so, for cancer does not kill by the disease alone, it kills because of pressures, hemorrhages, perforations, and deadening interference with the functions of important organs.

In Mayo's review of 266 partial gastrectomies for cancer of the stomach, the condition of 191 of which was known three years and over after operation, 38 were alive and well. Averaging all of his statistics of over three years after operation, one-fourth

of the cases whose condition was known are reported alive and well. This is a strong argument in favor of generous surgery, because the majority of these patients have no symptoms of disorder until late and thus do not come under observation in time, and, with many of those that do, the medical men do not diagnose them—although at least a diagnosis of 'surgery indicated' can be made in most of these if careful detail work is done. Now, if the case does not come under the internists or stomach specialists' attention, either because they have had no symptoms or been temporized with too long by general practitioners, the blame cannot be put on the internists or stomach specialists, but in those that do, they are then guilty of criminal neglect if immediate surgery is not encouraged. Mayo himself said: "It is my intention to call attention to two important indications for operation, which, if observed early, will be the means of securing a number of patients in time to benefit them. 1. Food remnants found repeatedly in the stomach after twelve hours, when taken in connection with the clinical history, should indicate a surgical consultation and, in the large majority of cases, this special investigation will lead to an exploratory operation. 2. The finding of a movable tumor in the pyloric end of the stomach has a surgical significance which cannot be over estimated. It is a great mistake to suppose that the presence of a movable tumor is indicative of a hopeless condition." To these I would add, the peristaltic wave jumps and localized thickenings in the pyloric end of the lesser curvature as seen by X-ray, and the special chemical tests of the stomach contents and feces. Along these four lines of investigation and careful study of the histories, most all of the cases can be picked out, and then the incisions made would be less often an exploratory incision than the first step in the performing of a partial gastrectomy.

That gall-stones are found present in ten per cent. of all autopsies and indigestion is so common, are not arguments enough in favor of general exploratory incision to make diagnoses of cholelithiasis. In the cases of recurring attacks of biliary colic with or without subsequent jaundice and other suggestions, the diagnosis is usually easy, but it is regarding the cases in which diagnosis is more difficult that I would speak. A decided constant tenderness in the gall-bladder with a chronicity of symptoms must be present before I would consider operation in these cases; and the same is true with all of the non-empyemic cholecystitic conditions. We may all agree that gall bladder cases which give local, gastric or general symptoms are always operative cases, but I feel that almost everyone of those operated upon and in which gall-bladder pathology or stones are not found is wrong, and

many of these are occurring every day which would not be so if more care were taken in the examinations.

Agreeing that acute hemorrhagic and suppurative pancreatitis are operative conditions, the diagnosis of either one is not so difficult. The symptoms of these pancreatic conditions, and perforations of the stomach, duodenum and gall bladder, and acute intestinal obstructions are always acute and severe enough to warrant immediate operation even when a diagnosis of one from the other cannot be made in advance. But why are so many exploratory operations being performed in which only chronic pancreatic disease is disclosed when careful work in feces and other tests will make the diagnoses just as well and when surgically nothing can be done for them?

A word now about peritoneal adhesions (not, for instance, the thick organized bands which run from the pelvis to the upper abdomen and those binding the hollow viscera into stenoses, which are always operable conditions), but just the short and easily broken down adhesions. Does an operation in which only adhesions are seen and separated and nothing more found to be done justify the performing of it. I do not think so, for my experience has been that no benefit comes from these operations and often decided harm is done.

Now that always interesting subject of appendicitis, about which in the years gone by so much has been said and written and for which so many operations have been done. There are some of us who were active in practice at the time the gridiron and short incision operation became popular and who are still active in medicine. Not one of these men would do other than worship at the shrine of this operative therapy on all true appendicitic conditions, and who would not agree to have his own and his patient's appendix removed at once when bona fide disease of it was present. But as the frequency of appendectomy has developed today, may we not look with a certain degree of question on the many appendices that are being removed, and ask was the operation really necessary? A week's attendance in the operating room of any of our great hospitals which have a large and active service side will display an accumulation of removed appendices which are a study in themselves. In former days much more so than now, we saw adhesion, strictured, bulbous, concretion, septic and gangrenous cases operated upon as the routine. Now these distinctly pathological appendices are by no means so common in the collection as formerly, as one can easily see from the clinical study of the cases operated upon, the operative findings, and the gross and microscopical studies of the specimens. Today, it seems sufficient for the surgeon's conscience

to have removed one only short and stumpy, one long angle-worm like, one curled like a pug dog's tail or laying retrocecal, one having a firm feel or quite relaxed, one with slight degrees of irregularity in the lumen or slight thickenings of the mucous membrane, and so forth. Mind you, I believe that every case of true appendicitis should be operated upon and at once, but the chronic gastric cases not due to appendicular disease wherein the appendix is removed because it can in some cases be a cause of gastric symptoms is going too far into needless surgery. A careful gross and minute pathological study of the appendices of a large number of individuals who have died from disease other than those of the abdominal structures, has proven to me that but few living and well individuals have perfectly normal appendices, and yet would it be warranted to remove every one of these, and force upon the public the dangers of post-anesthetic and post-operative neurasthenia? I doubt that there is reason enough of a prophylactic nature in the prevention of serious appendix disease to operate primarily upon all such appendices as these, because but few of them all ever would develop a serious trouble. We must have direct or at least good reason to suppose that definite appendicular disease exists before an appendectomy is justifiable, and cases should not be operated upon only on the chance that this may be so. Of course, when operation has been performed for some condition other than appendicitis it is well to remove the appendix as a prophylactic measure, but here the incision has been made and that justifies the appendectomy.

In this series of 387 individuals, appendectomy had apparently been performed 197 times, and yet they were no better, and many times worse because of it. If there is any one thing that shows the diagnostic shortcomings and liberal hands of the surgeon it surely was this group. Many times in other cases, the appendix was removed only a short time before and a chronic gastric or duodenal ulcer, gall-stones, etc., present at the time of its removal, left untouched. There were 9 cases in the group in which an appendectomy had been performed inside of a few months before we saw the patients with large sized hard nodular masses in the upper abdomen and all the symptoms of undoubted instances of advanced cancer of the stomach, and these were exactly the cases in the most numerous instance in which the surgeons rail hardest against the internists and stomach specialists. Plainly they are falling short too, or are developing a mortality in the search for a few of these conditions.

The statistics of surgery of the abdominal cavity will never be complete until they include the post-anesthetic and post-operative neurasthenias and psychoses. Every stomach clinic in the world is overrun with a type of individual who is more neurasthenic than

otherwise, and these with the primary atonies and prolapse cases are the ones who made up most of the 387 cases that were needlessly operated upon. To operate on a primary neurasthenia is positively unpardonable unless there is an intercurrent condition that warrants it to save his life or keep him from added suffering. In 69 of these 387 cases it was a fair clinical conclusion to arrive at that neurasthenic symptoms which were not present before had developed as a direct consequence of the operation. Of the 318 remaining, the individuals had become more distinctly neurasthenic in apparently 205 instances, and the 113 remaining it either was not so or there was question enough about it not to consider this in a definite way. Some of these had been operated upon as many as six times, and more pitiful was the fact that with many of them they were ready for as many more laparotomies as they would or could fall into the hands to do for them.

If you take a thousand cases that come with stomach trouble, you can learn that from diagnostic and therapeutic standpoints they are wholly medical in 95 per cent., and medical and surgical in 5 per cent. Thus, on this subject the internists and stomach specialists cannot be ultra-medical or the surgeons ultra-surgical. Every case should be medical before it is surgical, and the gap between the general practitioner and the surgeon should be filled by a new type of stomach man who is strong in diagnosis and inclined medically or surgically as the case may prove itself to be. The mistakes and shortages of the internists and stomach specialists mostly have been due to lack of work, and those of the surgeons to overwork. We cannot advance this part of medicine excepting on the basis of pathological diagnosis, which is neither medical nor surgical alone. Both sides must work in conjunction more than they do today, and the internists and stomach specialists must give better and more diagnoses to the surgeons than they now do, or at least say that exploratory incision is indicated, and surgeons should not operate unless there is some strong suggestion or logical reason for doing so.

I have tried in this paper to express some of my opinions based upon clinical observations. In the writing of it only the kindest of motives have moved me although it may appear that some hidden attack is contained in my words. I cannot feel that any of us are so narrow and self satisfied that we would not place the patient's interests above our own. Criticisms and suggestions in medicine should not be born of enmity and antagonism. With a more general sincerity, the medical men will make a better progress through surgery and the surgeons through medicine, for on this subject we cannot fail to know the right when so much is at stake.

Report of a Case of Tubal Pregnancy Within the Wall of the Uterus.

By C. W. HENNINGTON, B.S., M.D.

Surgeon to Rochester State Hospital. Surgeon to Out Patients
Rochester General Hospital.

THE patient is a young woman of 29 who has been married about five years and has one child. The labor and puerperium seems to have been normal in every respect and there is nothing in the general history or pelvic history that is worthy of note. Although three years have elapsed there had been no subsequent pregnancy. Her menstrual history shows a regular twenty-eight or twenty-nine day interval. The periods lasted five to seven days. The flow was normal in amount and not associated with any unusual pain. She never took to her bed.

The present illness may probably be dated from March 7, 1912, when she failed to menstruate. She recalls no symptoms at this time and supposed that she perhaps was pregnant. Two weeks later on March 21, she began with a profuse flow which lasted for at least nine or ten days. She was not ill and continued actively doing her house work. For the next months she menstruated regularly about April 22, May 22 and June 22. Each time there was the usual flow. However during this interval there were occasional days when a little bleeding occurred sufficient to slightly soil the clothing. During the last month she felt slight pain in the lower abdomen.

The actual illness commenced in the morning of June 28th with intense abdominal pain, general at first but soon located in the pelvis and the right iliac fossa. Morphia was required repeatedly. There was no vomiting at this time. The bowels moved frequently. Temperature and pulse were said to be only slightly, if at all, above normal. On the following day patient had vomited once, temperature showed no change, but the pulse rose to 120. She was brought to Rochester for operation that afternoon. On admission temperature was 100, pulse 120 and respiration 24.

Operation. June 29, 1912. 6 P. M. Low mid-line incision. Considerable free fluid, cloudy and with flakes of fibrin. Peritoneal surfaces red, dull and agglutinating. Appendix presented free in the wound and was removed. The uterus was soft and had a nodule in the region of the right horn which had perforated and was discharging pus into the peritoneal cavity. A hurried supra-vaginal hysterectomy with both tubes but only the right ovary was quickly done. The pelvis was free of any blood or inflammatory masses or adhesions. No cultures were taken. A large rubber drainage tube was placed through the lower end of the incision to the bottom of the cul-de-sac. Wound closed in usual manner.

Post-Operative History. Extreme Fowler's position and continuous saline per rectum. Uneventful and rapid recovery. Left Rochester for her home in three weeks and is now in perfect health.

Pathological Description of the Specimen. The uterus itself is of about normal size. On the right side and right fundus its shape is distorted by the presence of a nodule situated within the uterine wall in the region of the cornu. On the posterior and upper surface of this right end of the fundus is a perforation of the nodule from which pus is escaping. The tube is normal in appearance and joins the uterus at the lower outer surface of the nodule. The right round ligament is seen near the tube also on the lower outer surface of the nodule. The perforation just referred to is some 2cm. away and on the upper surface of the nodule.

On cutting the uterus open in the usual manner, the walls are found to be of normal thickness, that is nearly 2cm. The cavity is lined with bloody thickened endometrium. The triangular appearance of the cavity is not disturbed but just beyond the right cornual extension of that cavity and between it and the right tube is a spherical mass $2\frac{1}{2}$ cm. in diameter. This mass is surrounded on the upper and outer sides by uterine wall slightly less than $\frac{1}{2}$ cm. in thickness, but toward the cavity of the uterus it is separated from that cavity by only the thinnest layer of uterine wall, in fact no thicker than the endometrium itself. A probe can be passed down the tube into the interstitial portion within the wall of the uterus and approaches the mass directly, though it does not freely pass into it. From the aspect of the uterine cavity it is noted that the right cornual extension of that cavity points directly toward the mass and is separated from it only by the thin tissue referred to above. Thus the anatomical origin of the mass is shown to have been in the interstitial portion of the tube.

The mass itself consists of a thickened organized lining, now of the dark greenish to whitish hue, which can be separated easily from the cavity which it had produced in the uterine wall. The center of the mass is of a grumous friable content of irregular consistency and of dark color mixed with thick pus. Microscopic examination revealed the presence of placental tissue and confirmed the diagnosis of pregnancy.

Conclusion. Thus we have a case of tubal pregnancy in the interstitial portion of the tube, that is, in that portion of the tube which is burrowing its way through the wall of the uterus. Stated in a paradoxical way, we have an extra-uterine pregnancy within the uterus. This is the rarest variety of tubal preg-

nancy. It constituted only 3% of the 1324 cases collected by Rosenthal and only 1 of the 77 cases carefully described by Martin. From a consideration of the history and findings of this case it is evident that the course of this particular instance is of especial interest and constitutes the sole reason for publication.

The Mole: Its Relation to Malignant Diseases of the Skin. A Plea for Its Removal.

By JOS. SPANGENTHAL, M.D.
Buffalo, N. Y.

THE author imbued with the importance of the subject presents it for the consideration of the medical profession in general. To the specialist in dermatology it is almost necessary to apologize for offering a subject the importance of which has been so thoroughly recognized.

It appears trivial to urge the removal of an innocent growth like the mole, and justly so if removed for cosmetic purposes only; but, when consideration is given how frequently the dermatologist encounters malignant diseases of the skin, such as Epithelioma and Sarcoma in which a history is obtainable of an antecedent mole, then does this innocent blemish merit our most earnest thought.

After middle age certain changes occur in the skin. The skin at this time loses its elasticity, becomes relaxed and wrinkled. The hair which is a dermal appendage participates also in these changes, in becoming lusterless and gray. These are physiological changes due to age.

Concomitant changes are likewise observed in the mole, which are not always physiological. Oftentimes, there is seen a slightly scaly degeneration, which is distinctly pathological. Such a condition might exist for years without causing any anxiety, but too frequently it is otherwise.

There may be an increase in pigmentation, an hypertrophy of the papillæ, a border waxy in appearance with capillary dilatation, and here we have a picture of epithelioma. This condition might remain stationary for long periods of time, but is usually progressive. Infiltration with subsequent ulceration occurs, until there is an involvement of all the structures of the skin and underlying tissues.

It is surprising how frequently patients present themselves to the dermatologist with epitheliomata in all stages of development, who were not aware of the seriousness of their condition. They give a history of a wart or mole which had been present for years; and only after serious degenerative changes have occurred, do they consult the dermatologist.

Too often does the family physician who perhaps has seen it in its incipency only, pacify the patient with assurance of its insignificance. The patient's anxiety appeased, considerable progress would occur, and valuable time would be lost.

The following two cases will suffice as illustrations. Case 1. A middle aged man suffering from a large melanotic carcinoma, in which the large toe and part of the foot were involved. The history was that of a pigmentary mole of many years duration. This began to undergo changes of a malignant nature, which caused him some alarm. Still he did not think it serious enough to consult a dermatologist. The patient neglected for some time, and later came to the city for consultation. A diagnosis of melanotic carcinoma was made, and a complete amputation of the foot was necessary. A year previous, a simple operation for the removal of the mole would have been sufficient.

Case 2. A woman aged 65, with a malignant growth the size of a cherry, situated on the end of her nose. This same patient had an epithelioma over the tibia, another the size of a penny on her abdomen, a nævus pigmentosus undergoing epithelial degeneration on her chest, and another nævus over the right temporal region. These fortunately were amenable to successful treatment.

In an address delivered by Dr. W. S. Bainbridge, Surgeon to the N. Y. Skin and Cancer Hospital—"The Campaign Against Cancer, Educational, Experimental and Clinical," he says: "Actual experience gained from the study of hundreds of cases similar to those presented above, (See *American Journal of Dermatology*, Vol. XV., No. 7) has convinced us that a large proportion of severe and perhaps fatal malignant neoplasms may be traced to apparently insignificant and harmless warts, moles, nævi, scars, etc., which are subjected to irritation of one kind or another, and which are easily and completely removed by surgical means."

Hartzell in an excellent paper entitled "Some Precancerous Affections of the Skin," writes, "New growths of the skin congenital or acquired after a longer or shorter duration as benign affections, may undergo cancerous change; warts and pigmented nævi showing the greatest tendency to such a metamorphosis." Again he states that of 223 cases of carcinoma of the extremities collected by Rudolph Volkmann, 23 or a trifle more than 10% had their origin in congenital or acquired warts or moles. He also writes of the pigmented epithelioma originating from the pigmented nævus as being the most malignant of the new growths; of its rapid advancement and wide spread metastases and its almost certain recurrence.

In making a plea for the removal of the mole, two reasons are

worthy of consideration, the cosmetic and the prophylactic. The operation for cosmetic purposes, applies to all young individuals; for among them, malignancy is quite rare. In those past middle age, it becomes more urgent from a prophylactic view-point, and in these cases the operation should be advised. Especially is this applicable in the pigmentary variety.

The simplicity of the operation, and the freedom from pain and danger, offer excellent reasons for their early removal.

595 Lafayette Ave.

Three Years with the Army of the Potomac—A Personal Military History.

BY WILLIAM WARREN POTTER, M.D., BUFFALO, N. Y., BREVET LIEUTENANT COLONEL, U. S. VOLUNTEERS; SURGEON IN CHARGE OF FIRST DIVISION FIELD HOSPITAL SECOND ARMY CORPS; SURGEON 57TH REGIMENT NEW YORK VOLUNTEERS; ASSISTANT SURGEON 49TH REGIMENT NEW YORK VOLUNTEERS; RECORDER SECOND DIVISION HOSPITAL SIXTH ARMY CORPS, ETC., ETC.

Deep Bottom, No. 1.

We marched about three o'clock P. M. Tuesday, the 26th, crossing the Appomattox River at Point of Rocks at eleven o'clock at night, and the James before daylight at Jones' Neck, or Deep Bottom. The first Division had a fight early Wednesday morning, the 27th, capturing four twenty pounder Parrott guns, and a number of prisoners, losing about one hundred men killed and wounded. I rode in the leading ambulance Tuesday night, and was asleep when we crossed the James, the pontoons being muffled so the rumbling over the bridge did not even disturb me. I did not wake until the booming of the guns next morning suddenly aroused me, when I took a hasty cup of coffee and began work. It was expected that this movement would be such a surprise to the enemy that we could push on towards Richmond by this route, and possibly enter the city. But it appears the enemy had fortified a line across our path, and as it had become a part of reform policy on the part of Grant not to attack intrenched lines, we were foiled in the one object of the movement. But there was another which seemed to be prospering better. The mine that was constructing in front of Burnside's lines before Petersburg, was now completed and ready for firing. We, therefore, remained over the James River until more than one-half of the Confederate force was attracted hither in the belief that our attack in this direction was still real.

July 30. We remained at Deep Bottom until the night of the 29th, when, turning upon our heels, we marched rapidly back, reaching the lines in rear of the 9th Corps in time to witness the explosion of the mine this morning, which occurred soon after daylight. The bombardment and assault soon followed, and the 2d Corps was massed in reserve, expecting the order every moment to go into the support of the troops already swallowed up in the seething vortex of destruction. When the mine was exploded, it gave forth a low, rumbling sound that shook the earth for a considerable distance, and sent up into the air a cloud of red sand and earth that resembled a water sprout at sea; and in this dusty cloud were men and guns, and material, mixed in inextricable confusion, all going to their death and destruction. The movement that the 2d Corps was momentarily expecting was suspended, owing to the failure of the Ninth Corps to do its work properly, and we are back again at the Burchard House with our hospital, though it is expected that we may be compelled to move yet tonight. I have had no sleep to speak of for the past three nights, and am, therefore, a good deal worn down; so I hope we can rest for at least one night.

Monday, Aug 1. We packed up and started to move Saturday night but had gone only half a mile when the orders were countermanded, so we turned around and came back again. Last night orders were issued for the corps to be ready to move at a moment's notice, and it is the general impression that we shall move somewhere within the next twenty-four hours. Captain Wilson and Captain Elliot paid me a visit this morning, both in good spirits and handsome as ever. Colonel Beaver returned two days ago, but has not fully recovered from the effects of his wound and will, therefore, go back again in a day or two. The weather is very hot again, and we cannot be persuaded to do anything in the daytime that can be postponed until night, or some other good and convenient season.

Wednesday, August 3. The band came to play for the hospital today by order from Division Headquarters, and everybody enjoyed the music, notwithstanding the heat, including Colonel Beaver who is here. Mrs. General Barlow died in Washington last week, and General Barlow has gone North for fifteen days. Poor woman! she contracted her illness in the care of the soldiers; and I deeply sympathize with the General in his affliction. I have just learned of the death of Paymaster A. C. Winter, U. S. Navy, whose wife was Mollie Raynor, of Lansing, Michigan. Surely sad news comes in duplicate. When we were over the James at Deep Bottom the other day, I was within two miles

of the iron-clad *Cannonicus*, on board of which Dr. Adams is serving. I have drawn my pay for July, and shall send home \$120.00 by Colonel Beaver who goes away tomorrow for twenty days, and will deposit it in the Express office in Washington for me.

Friday, August 5. Quietude reigns in the camp of the Army of the Potomac today. Indeed it is too hot for anything but quietude. I have invited a little dinner party this evening, among whom are Captain Favill, Captain Bronson and Captain Middleton, and shall serve a little extra menu, with ice cream and oranges for dessert. The dinner is given in honor of Favill, who goes out of service in a few days.

Monday, August 8. Dr. Dougherty expresses himself as anxious for me to return to service as an acting staff surgeon under the new order, and promises me the charge of the hospital if I will do so, but I have given him no encouragement in that direction. Yesterday Miss Hancock came up from City Point and spent the day at the hospital, and Miss Gilson called upon me last evening. Miss G. offers to come up and remain a week, caring for some of our bad cases, a kindness which will be duly appreciated. We can give her good quarters in the house, and, as she sings well and plays the piano beautifully, it will be quite a cheerful change to have her here, even for a short time. The failure at the mine explosion of July 30 is still the theme of conversation among the officers, but no one seems to know just where the responsibility rests: a Court of Inquiry will, I suppose, fix that in due time. A number of leaves of absence have been granted during the past month, among them one to Dr. Rowland, who goes home sick.

August 10. Wednesday. Everything is going on in the usual daily routine, though there was a little more firing than common on the lines last night and this morning. Yesterday a barge at City Point, loaded with ammunition, blew up by accident, killing and wounding about a hundred men. The explosion was terrific, and could be heard for miles away; we heard it distinctly, and are six or seven miles from the point. One surgeon going home on leave, and awaiting transportation, was blown to atoms. Captain Favill will be mustered out tomorrow, together with the greater part of his company. My groom, Corbleigh, will be mustered out on the 22d, but will remain until I go, to take care of my horses during transportation.

Friday, August 12. Yesterday I went to City Point to see Captain Favill off. Yes, Favill has gone! I am sorry, for he was a gentleman in the best sense of the word, and a companion who

will be very much missed by all his friends. He has invited me to visit him in New York, at his father's, when my time expires. Dr. J. C. Norris, 81st Pa., my Assistant and Recorder, went home yesterday for twenty days. The day is intensely hot, as usual, not even a breath of air stirring. Lieutenant Alvord of General Caldwell's staff, whom we all remember with the kindest feelings, and who was married some time ago, is saddened by the grievous illness of his wife, who is reported in a dangerous condition. Lieutenant Hall was mustered out with Favill, and Captain Jones goes in a day or two; so the 57th is gradually melting away.

Deep Bottom. No. 2.

Monday, August 15. Here we are across the James again right where we were before, and we are called by the soldiers, "Hancock's Cavalry." The troops moved down to City Point on the afternoon of the 12th, took transports that night, and were sent up here and landed next morning, while the trains went overland and crossed on the bridges as before. We had a fight yesterday, and I have 160 wounded in my hospital. I amputated Captain James C. Bronson's right forearm yesterday, and he is now in my tent doing well. The day is intensely hot, almost to suffocation.

August 16. Today the cavalry and the First Brigade, General Miles, had a fight on the extreme right of our line near Charles City X Roads; the results of which I have not yet ascertained. I have about sixty additional wounded today, and the heat continues as great as ever. This afternoon a terrific thunderstorm burst over us, nearly collapsing the hospital tents. My own tent was in such extreme danger of going down, that I had four men hold it up by steadying the ropes at the corners, to keep it from crushing Bronson who is inside with an amputated arm. After the rain I witnessed an artillery duel between four or five of our gunboats, and some land batteries of the enemy. It occurred just at night, and was a splendid sight.

Saturday, August 20. Yesterday I was directed to superintend the shipment of the wounded of the Second Corps and the Cavalry Corps, which made a busy day of it. Two transports, the "Kent" and another, were moored at the wharf opposite my quarters that are on the bank of the river, and the wounded were carried on Board by the Ambulance Corps. The point where I am located is only two or three miles below Aiken's Landing, the latter being the place where I was delivered to the U. S. authorities, after being released by the rebels two years ago. After being in the front of Petersburg so long, where there is nothing but dust and fire—fire of the batteries—it is a delightful change

to witness the transports and gunboats sailing up and down the river, at night blowing their whistles and displaying their parti-colored lights to avoid collision; it gives the scene a wonderfully commercial aspect, unlike the ordinary surroundings of war. One night I counted nineteen vessels from the top of the bank near my tent. Among the wounded sent away yesterday was Captain Bronson, who will never return to active service, though he could, and probably will, enter the veteran reserve corps. He gave me a fine new saddle cloth, breast strap, and other horse accoutrements. We have had rain for the last three days, and it continued all last night, so this morning the roads are not inviting to a long march.

Tuesday, August 23. We left Deep Bottom Saturday evening, marched all night, and next morning found ourselves at the Burchard House again; and, after a short halt for coffee, we marched to the extreme left, to support Warren's Fifth Corps in its struggle to take and hold the Weldon R. R. The rebels strove desperately to drive Warren off, assulting his position five times, and were as many times repulsed, with considerable slaughter. We have had much rain during the past week, which has served to make the roads very bad, but has not cooled the air; indeed, it is about as hot as ever. Dr. Gesner is back after his long absence, and Dr. Aiken has returned as an acting Staff Surgeon, taking charge of the Second Division hospital again.

TOPICS OF PUBLIC INTEREST.

TYPHOID DEATH RATES.—The accompanying illustration shows the comparative death rates per 100,000 population for



various countries. It is kindly furnished by the *Human Factor*, the organ of the Equitable Life Assurance Society.

DRINKING AND SMOKING IN CANADA.—Through the courtesy of Mr. Wm. Himsworth, Acting Deputy Minister of the Department of Inland Revenue, Ottawa, we are enabled to publish the figures showing the per capita consumption in Canada of spirits, beer, wine and tobacco, for the fiscal year ended 31st March, 1912. The estimated population of Canada for that year, founded on the census of 1911, was 7,423,000.

The quantities consumed were as follows:

Spirits—7,646,834 gals.—1.030 per cap.

Beer—48,978,394 gals.—6.598 per cap.

Wine—850,017 gals.—.114 per cap.

Tobacco—27,309,604 lbs.—3.679 per cap.

For the fiscal year ending 31st March, 1911, the quantities were:—

Spirits—6,786,069 gals.

Beer—42,938,603 gals.

Wine—819,687 gals.

Tobacco—23,790,120 lbs.

The population of Canada June, 1911, according to the census, was 7,204,838.—*Canadian Journal of Medicine and Surgery*.

LACK OF FRESH AIR.—Dr. Livingston Farrand of the National Assn. for the Study and Prevention of Tuberculosis claims that not one person in a hundred gets enough fresh air. We are willing to concede that, at times, as at the theatre, in a street car in winter, and in various emergencies, every one suffers from inadequate ventilation and it is possible that, for a city like New York, with a dense population often affected both by poverty and ignorance, only one per cent. may have sufficient air but we are inclined to the optimistic opinion that, at present, the great majority of fairly intelligent persons enjoy plenty of fresh air at most times. However, the Association's hand-book on "Fresh Air and How to Use It," by Dr. Thomas Spees Carrington, will fill a need.

LECTURES AT N. Y. POST-GRADUATE MEDICAL SCHOOL AND HOSPITAL.—Prof. H. Strauss of Berlin, will lecture on Disease of the Stomach and Kidney, Oct. 12, 14 and 15th. Prof. Carl von Noorden of Frankfort, will lecture on the Pathology and Treatment of Diabetes, Radium Therapy and Arterio-sclerosis, Oct. 28th-31st.

HOSPITAL FOR APPENDICITIS.—The only hospital in the world thus limited, will be opened in Boston this month by Dr. Wm. A. Brooks, Jr. Although private, charity cases will be taken.

MALTA FEVER is said to prevail in Edwards and Val Verde Counties, Texas, and to have been traced to goats.

EQUINE CEREBRO-SPINAL MENINGITIS.—Dr. A. Boostrom, Nebraska State Veterinarian, reports that hundreds of horses have died of an epidemic—or epizootic—of cerebro-spinal meningitis in the vicinity of Holdredge.

GENERAL SUMMARY OF STATISTICS OF PROFESSIONAL SCHOOLS, 1910-11.

Class.	Schools.	Instructors.	Students.	Increase (+) or decrease (—)	Graduated in 1911.	Students having a degree.
Theology	193	1,495	10,834	— 178	1,877	3,266
Law	116	1,570	19,615	+ 48	3,901	4,180
Medicine	122	7,598	19,146	— 2,248	4,028	2,044
Dentistry	55	1,574	6,961	+ 522	1,764	122
Pharmacy	77	847	6,131	— 95	1,743	84
Veterinary m. . .	21	408	2,571	— 146	706	18

Statistics are dry on the surface, sometimes very juicy at the core. If we note that for an almost exactly equal number of students, it takes five times as many teachers in the average school of medicine as of law; or looked at another way, that the average medical faculty has about $2\frac{1}{2}$ students apiece, we can understand a good many ethical and economic problems. The gist of the whole problem of medical education is that it is neither philanthropy nor business; that, for the country at large, it is obviously a matter of amateur cooperation for the sake of indirect gain or glory. Such work cannot be satisfactory from any standpoint. Let us hasten the day when the medical teacher will be paid adequately so that he can devote his best energies to teaching as a life work instead of a side-line.

LIGHTNING.—The Weymouth, Mass., Hospital was struck four times during a storm early in July and again on Aug. 14. Considerable damage was done by fire but no lives were lost.

The thunder storm that passed over western Pennsylvania and New York on Sept. 6, stunned a man near Jamestown, deafened a telegraph operator at Bradford and killed twin babies in Silver Creek. Curiously enough, no trace of damage was left in the room but the house next door was damaged though no one in that house was injured.

It is a fact that deserves elucidation that death from lightning occurred to one person each year in a million living in cities of the registration area for the decade 1900-09 while, for the coun-

try, the figures varied from 6 to 10 and averaged 8 per million population. (Statistics courteously furnished by E. Dana Durand, Director of the Census). Last summer, between Detroit and Ann Arbor, we noticed quite a number of lightning rods which have gone out of fashion in Western N. Y. It occurs to us that the whole matter of danger from lightning, to human beings, domestic animals and property, is well worth thorough scientific investigation.

ANTERIOR POLIOMYELITIS.—Cases of this disease are being reported in Buffalo and many surrounding towns. On Sept. 6, Dr. Fronczak called a mass meeting of physicians in the Common Council Chamber. More than 400 persons, mostly physicians, responded. The following program was presented:

Dr. Wade H. Frost, Past Assistant Surgeon of the United States Public Health Service—"Epidemiology and Etiology."

Dr. Frank A. Fraser, Clinician in the Hospital attached to the Rockefeller Institute for Medical Research—"Pathology, Symptomatology, and an outline of the work and the results obtained in the Institute."

Dr. Nelson G. Russell, of the Ernest Wende Hospital Staff—"Diagnosis and Treatment."

Dr. Edward A. Sharp, of the Ernest Wende Hospital Staff—"Presentation of Cases."

Dr. James P. Leak, of the United States Public Health Service, and Dr. Harlan P. Cole, Consulting Orthopedist of the New York State Department of Health, also addressed the meeting.

On consultation with several of the speakers it was decided not to attempt to reproduce the remarks, even in abstract, as the object was merely to call attention to the epidemic and to review well known facts regarding the disease. The Supt. of Education, Henry P. Emerson, called attention to the fact that school registration had diminished through fear of the disease and he asked Dr. Fronczak as to the actual danger of contagion. The reply of the latter was to the effect that the general opinion of the profession held the danger of contagion as slight.

We recommend the general tendency of the press, the profession and the various "experts" sent to Buffalo to study the epidemic, to regard matters in a conservative way. Anterior Poliomyelitis is by no means a new disease nor has there been any great increase in its prevalence of late years. While a student at the University of Pennsylvania in 1888-9, we received almost exactly the same teaching as to its nature as some consider distinctly modern. That is to say, its pathology was well understood and it was regarded as probably of bacterial origin,

possibly even due to a specific germ, but not yet demonstrated. Regarding the supposition of an "ultra-microscopic" germ, we would say that most undetermined diseases have been ascribed to such causes, that several apparent demonstrations of ultra-microscopic virus have been shown to be due to leaky porcelain filters and that the treponema of syphilis is a good deal larger than most specific disease germs, although this disease was *once* stated to have been demonstrated to have an ultra-microscopic cause.

Dr. Fraser pointed out that the disease attacked the anterior horns largely on account of the anatomy of the blood vessels and that much of the initial paralysis was due to hyperaemia and active oedema. It is just possible that there is such a process as non-bacterial inflammation and that this disease will prove to be of such nature. However, we are inclined to the infective theory though not necessarily to the idea of a specific germ.

Our foreign exchanges state that a movement is on foot in France to augment physicians' earnings, on account of rise in cost of living. One estimate is that an unmarried French physician must earn \$1700 a year to pay expenses. This statement we doubt very much. In 1908, one of our medical friends in Paris, a bachelor of about 60 years, an expert in cardiac diseases, regarded as successful for one not a celebrity, spoke of his daily average earnings of 50 francs, with frank pride. He occupied an apartment near the Place of the Star, at about \$60 a month, fairly comparable in desirability and price with similar apartments in large American cities. Speaking generally, the cost of living in Paris is about two-thirds what it would be in Buffalo, Rochester, Syracuse, etc. Not only can an unmarried physician live in the United States for less than \$1700, but the average of all physicians, married or single, do live on considerably less, according to all estimates that we have seen. Whether there is the same proportionate difference in cost of living between large and small towns in France as in America, we cannot say, but we are very sure that an unmarried physician can live on \$1200 a year in America in a fair degree of comfort and that he could live equally well in Paris on \$800. But we are not pleading that he ought to be compelled to do so.

ANTI-TYPHOID VACCINATION.—Dr. W. H. Watters, Director of the Dept. of Pathology and Bacteriology, Evans Institute for Clinical Research, Boston, is collecting data. He requests references to published articles and unpublished case reports for which special blanks will be furnished.

PRIZE ESSAY ON THERAPEUTICS.—The American Therapeutic Society offers prizes of \$250, \$150 and \$100 for the best three papers on some substance official in the U. S. P., submitted before April 1, 1913. The usual conditions as to secrecy, originality, standard of merit, typewriting, etc., are in force. Address Dr. Reynold Webb Wilcox, Chairman, N. Y. City.

HISTORIC EXHIBITION OF RARE AND CURIOUS OBJECTS RELATING TO MEDICINE, ETC.—Mr. Henry S. Wellcome, the well known pharmaceutical manufacturer is organizing such an exhibit at the time of the International Medical Congress in London in 1913. His own research and collection are of the highest value and he bespeaks the assistance of physicians and others all over the world.

We take the liberty to suggest that exhibits of this nature, on a small scale, necessarily, might well be undertaken by various societies in our own territory. The editor has several medical books from one to three centuries old and many of his acquaintances have larger collections. Dr. Park's collection of copies of mediaeval pictures bearing on medicine and surgery is of great value. Old instruments, signs, record blanks, etc., even if not ancient, would be of local interest. From our whole territory, a very considerable exhibit could be gathered which might be passed from city to city for inspection and discussion. Perhaps some of our readers can augment the editor's personal collection of Indian bones showing fractures, arrow head wounds, syphilitic (?) lesions, and anomalies. We would like to see the best of such a collection of local antiquities in London, next year.

THE GOAT INDUSTRY.—Apropos of Mr. Bull's book on the Goat, reviewed in our May, 1912, issue, the report of U. S. Consul, Canada, (his name, not a misprint) at Vera Cruz, Mexico, furnishes strong corroboration of Mr. Bull's plea for goat raising in the U. S. Mr. Canada refers to the feasibility of raising goats on arid land, unsuited for other purposes and says:

The value of the goat depends upon three things, meat, tallow, and the skin. * * * The matter of fresh meat in the farming districts of the hot country is greatly simplified by the breeding of goats. In small, isolated communities it is risky to slaughter an ox or cow, as the flesh is liable to spoil before it is consumed. The small carcass of a goat makes it entirely practicable to kill frequently without risk or loss. In the State of Tobasco the inhabitants are never at a loss for fresh meat on plantations where goats are raised, and where formerly meat was almost un-

known. * * * The flesh alone would make it a profitable industry, for the carcass of each animal will bring from \$1 to \$1.50. Fats of all kinds are high priced in all parts of the country. * * * At two years a fat goat will yield 6 to 10 pounds of clear tallow, which will be worth from 75c to \$1.50. * * * The most valuable part of the goat is the skin, worth \$1.25 to \$1.50, and the constant trend of prices is upward." (These figures of values are presumably in Mexican currency, in which the dollar is equivalent to about one-half dollar in United States currency).

The Consul adds that the increase in the number of goats is very rapid, since they begin breeding at from 6 to 8 months of age, and breed twice a year, bringing forth two and not infrequently three kids at each breeding season. A single shepherd it is said will look after at least 1,000 goats. He adds: "A careful investment of \$1,000 well looked after can certainly be counted upon to double itself inside of 2½ years, and to give at least a 50% profit per annum from the end of the second year." The report of Consul Canada closes by presenting the result of a three years experiment in goat raising on a farm in the State of Guerrero, Mexico, as follows:

"In 1904 the manager of the farm received 66,000 goats, including large and small, at a valuation of \$1.50 each, equal to \$99,000. From the produce of these he sold, during 9 months of 1904 and the years 1905 and 1906, 50,000 head at \$5 each, equal to \$250,000, and had, at the close of 1906, 88,000 head on the farm, being 22,000 more than he started with. The result was, counting the value of the 22,000 increase at \$1.50 each with the foregoing sales, the investment of \$99,000 produced in less than three years \$283,000, besides the original stock of 66,000 goats was intact." (Figures in Mexican currency.)

The above facts as to the possibilities in the increase of the meat supply of the United States, while retaining at home the hundreds of millions of dollars now sent abroad for the purchase of goat skins, and producing this supply of valuable material on lands now practically unutilized, are cited as the cause of the numerous inquiries upon this subject now reaching the Department of Commerce and Labor. The number of goats now produced in the United States is small compared with that of many other countries. The latest figures in the Bureau of Statistics show the number in the United States in 1910 at about 3 million; in Mexico, 4¼ million; Turkey in Asia, 9 million; British South Africa, 12 million; and British India, 34 million.

Furthermore, it is probable that the availability of goat meat and milk will prove of great economic and humanitarian value in preventing tuberculosis.

STATISTICS OF MEDICAL EDUCATION.—In accordance with a precedent now several years old, the *Journal of the A. M. A.* in its issue of Aug. 24, 1912, presents an elaborate report on various phases of medical education, which deserves the careful study of every medical man. Last year, the "non-descript" medical schools disappeared from the list; this year, "physio-medical" have disappeared; eclectic schools have decreased to 6 and homoeopathic to 10, leaving an even hundred regular schools. Altogether, the colleges have decreased from 166 in 1904 to 116.

The graduates, who have declined almost steadily from the high mark of 5747 in 1904, showed a slight increase from 4273 in 1911 to 4483 in 1912. However, the total number of medical students has declined from 28,142 in 1904 to 19,786 in 1911 and 18,412 in 1912. Thus it seems almost certain that next year's class will drop lower than in 1911. But it is interesting to note that while, with the larger numbers of students and some colleges still giving only three year courses, less than one-fifth of the total number of students graduated, at present, very nearly a quarter graduate, as should be the case with four-year courses throughout and no waste of time by men passing from one plan of life-work to another.

Almost exactly 10% of the total graduations were from New York State colleges: 429; and this state also contains about 10% of the licensed profession: 13,641, according to the directory prepared by the state in 1911. About 2% of the profession die annually; the increase in total population and hence for the relative need of physicians is about 2% and, so far as can be judged from a careful local study, about 5% of the profession, as listed, is not in practice. Hence, it is obvious that the average clientele is increasing, but very slowly. Now is the time to restrict still further the output of unneeded physicians.

VEHICULAR FATALITIES.—The National Highways Protective Society reports 20 children and 28 adults killed in New York City in August, 1912, about double the number killed in August, 1911. 18 deaths were caused by automobiles, 13 by trolleys and 17 by wagons. 263 persons were injured by vehicles. In New York State, outside of New York City, the latter having a little over half the total population, 17 deaths were due to automobiles, 12 to trolleys, none to wagons. 209 traumatisms occurred, 175 due to automobiles, 12 to trolleys, 20 to wagons.

A good many deaths directly due to street cars and horse-drawn vehicles are undoubtedly due to attempts to dodge approaching autos, of which most persons have an especial and perfectly justified fear. Previous statistics have shown that au-

tomobiles have, for nearly ten years, caused more deaths than street and railroad cars combined. The humble bicycle, so much feared a few years ago, seems to have lost its death-dealing powers, or rather it was formerly rated as much more dangerous than it really was. Children will be killed by vehicles, in spite of the utmost care by chauffeurs, motor men and drivers, just as long as they are allowed to use the streets as a play ground.

CENTENNARIANS.—David Hancock of Red Wing, Minn., celebrated his hundredth anniversary on Apr. 12, 1912, with his comrades of the 3d Minn. Infantry. He was past the age for enlistment during the Civil War but the lieutenant colonel of the regiment took a few years off his age. The *Boston M. & S. Jour.*, of Aug. 29, 1912, reports a man and a single woman who have recently passed the hundredth birthday, a married woman who was 106 on Aug. 26; and another nearly 102.

THE INTERNATIONAL JOINT COMMISSION will meet in Ottawa, Oct. 1, to begin active work on the problem of pollution of the Great Lakes, tributary and communicating streams. We have elsewhere presented statistics of typhoid incidence. Various European cities have typhoid death rates of 1 to 8 per hundred thousand population. Niagara Falls averaged 129 for the ten years 1898-1909 and ran up to 222 for 1907. We personally believe that the million and more tourists to the Falls every summer disseminate typhoid over the whole country just as truly, though not quite so spectacularly as pilgrimages to Mecca have disseminated cholera Asiatica. It is not yellow journalism but a very conservative statement and probably far below the ultimate total, to say that this commission holds in its hands the lives of a thousand human beings a year.

NIAGARA WATER.—Lockport and the Tonawandas are protesting against the gradual filling in of the channel west of Motor (nee Frog) Island, claiming that the shutting off of the current from the west side of the river renders the pollution by Buffalo sewage more noticeable. The contention is entirely correct and the channel should not only remain open but should be dredged to a navigable depth. However, we would advise the down-stream cities not to depend upon the displacement of the polluted eastern current by the re-establishment of the clearer inflow from the west but to filter, or boil the water or to introduce general anti-typhoid vaccination until we are civilized enough to keep our sewage out of the river.

ASSISTANT IN EXPERIMENTAL THERAPEUTICS, Philippine Service. Eligibility will be determined by credentials as to attainments and experience. Initial salary \$2,000. Apply for Form B.I.A. 2, of U. S. Civil Service Commission. Applications must be returned complete, by Oct. 11.

The new building of the German Deaconess Hospital of Buffalo, will be formally opened Oct. 1. Receptions will be held for several days before the patients will be transferred. The old building will then be used as a nurses' home and to accommodate aged persons not under active treatment.

ABSTRACTS

REVIEW OF RECENT ATTEMPTS TO JUDGE PANCREATIC ACTIVITY BY CLINICAL TESTS.—By Dr. Leech (*The Practitioner*, November, 1911).

The glutoid and salol tests are of little actual value; the nuclear test is doubtful. The presence of voluminous light-colored stools, undigested meat fibers, and of fat in large quantity, especially of neutral fat, are valuable evidence of pancreatic disease, but of advanced pancreatic disease either actively destructive or blocking the duct and not of fine changes which frequently cause dyspepsia. The value is enhanced if a Schmidt's diet is given. The unfavorable verdict in numerous recent articles on Cammidge's test is disappointing; the test cannot be said to have fulfilled the hope built up on it. The future of various ferment tests seem good, especially those for amylase and trypsin in the feces, and perhaps of amylase in the urine. The worth of the tests is all the greater where the value of ferment in urine and feces can be compared. A large field of work lies open on this subject but the present clinical value is small. Gross changes alone are indicated; we have yet no sure test for fine pancreatic changes.

CONSTRUCTION OF AN ARTIFICIAL VAGINA FROM SMALL INTESTINE.—In *Weiner Med. Wochensch.* No. 49, Dr. Halban is reported to have constructed an artificial vagina from small intestine. After performing laparotomy he incised the peritoneal fold between the bladder and the rectum and then separated the bladder from the rectum as far up as the vaginal *cul de sac*. He then excluded a section of the small intestine and united the central and peripheral portions of the gut by lateral anastomosis. Then he implanted the excluded intestinal segment into the vulva and

sutured the incised peritoneal fold leaving an opening for the passage of the mesentery of the implanted segment of gut. Lastly he enlarged the vaginal opening and sutured the gut into position. The operation proved a complete success from a functional point of view.

SIX CASES OF HAIRPIN IN THE BLADDER. Adame, *Riv. di Med. y Cirujia Pratic.*, June 28, 1911. Five cases were in young girls one in a multipara. Three were subjected to abdominal section, one to vaginal, two to extraction by the urethra, all with perfect results. In addition, he notes 8 cases of calculus of the bladder not due to foreign bodies, equally successfully treated.

ABSORBENT COTTON TO FACILITATE EVACUATION OF SWALLOWED COINS. D'Halluin, *Trib. Med.*, Sept., 1911. A boy of five years had swallowed two five-centime pieces (about the same size as Canadian cents) which were seen by radioscopy in the gastric region. Confections were made with absorbent cotton powdered with bismuth and these the child, after a few hours fasting, swallowed greedily. The shadow thus produced obscured that of the coins, proving that the latter were really in the stomach. Eighteen hours later, a voluminous mass was indicated in the rectum but a smaller mass made a shadow, containing the darker shadows of the coins, in the cæcum. On the second day after administration of the cotton, the coins were passed simultaneously and without a bit of faecal matter, according to the mother's statement.

A NEW INSTRUMENT (DISTINGUISHER) FOR RADIOSCOPY. Guido Holknecht, *Archives d'Electricite Medicale*, Oct., 1911. Manual pressure has been employed to bring out more distinctly shadows of certain organs in abdominal radioscopy but the hand is subjected to rays passing through the patient. To avoid this danger, the author has invented a crank-shaped instrument ending in a spoon-like pressor, the recurved crank coming out in front of the screen with a handle. The hand, holding this handle or knob is protected by the lead glass of the radioscopic screen from the X-rays.

PRIMARY CANCER OF THE LIVER WITH GLYCOSURIA. Leuret and Creyx, *Jour. de Med. de Bordeaux*, Jan. 28, 1912. A woman aged 63, had had glycosuria with slight azoturia but without polyuria, for four years. She entered their service with copious diarrhoea and intense anæmia. The tentative diagnosis was of pancreatic tumor, though there were no physical signs. At nec-

ropsy, a spheroid mass was found in the right lobe of the liver, inclosed in normal hepatic tissue. There was no other cancer and no pulmonary tuberculosis. The exact cause of death seemed to be a gradual exhaustion, there being no acidosis nor other complication. The case was not considered genuinely diabetic. Nothing could be found in the literature bearing on the relation of hepatic tumor to glycosuria nor was there a report of a similar case. (Note.—Some years ago, we saw a case of typic chronic alcoholism with gastritis and moderate contraction of the liver. On necropsy, several discrete hepatic cancers, from the size of a bean to that of a walnut were found. There was no bossilation of the liver and the cancers had, of course, not been diagnosed. There was no other cancerous involvement and there had been no glycosuria. A. L. B.)

IDENTIFICATION OF CHARRED CADAVERS BY X-RAYS. Branly, *Acad. des Sciences*, Oct. 9, 1911, commenting on a report of Fouveau of Corrmelles, in 1897, brings up the possibility of identifying corpses with destruction of features by this means, implying that for workers in extra-hazardous occupations, preliminary examinations might be made as to fractures, exostoses, irregular shadows due to variations in the mineral deposits in bone, etc.

THE OLDEST GIANT. M. U. Sateschi, *Riv. Italiana du Heur.*, etc., Vol 4, 1911, cites a case of typic acromegalic gigantism, including complete anatomic and physiologic sexual infantilism, but with full mentality and good general health at the age of 76, the greatest age attained by any known giant. By X-rays, it appears that there is no increase of capacity of the sella turcica.

LYMPHANGITIS TREATED BY ZINC IONIZATION. Marques, *Arch. d'Elect., Med.*, Dec. 10, 1911. The lymphangitis occurred three days after a punctured wound of the fore-arm. 2% solution of zinc chlorid was applied on absorbent cotton, connected to the positive pole and 40 milliamperes were passed for 30 minutes next day, the process seemed to be at an end but there was a recrudescence after three days, permanent recovery following a second treatment.

INNOCUITY OF MILK FROM TUBERCULOUS COWS. Chausse, *Annales de l'Institut Pasteur*, July, 1911. The author considered 98% of bovine tuberculosis due to inhalation, except that in calves, subjected to risk from tuberculosis milk, 10% succumbed. He regards the practical danger of tuberculous cow's milk to human infants as slight.

CANCER OF THE BREAST IN MALES. Pourtau, *Jour. de Med. de Bordeaux*, Feb. 4, 1912. The affection is rare and assumes three forms: cancroïd, ulcerated tumor, beginning in skin, secondarily glandular; epithelioma or carcinoma primarily glandular, later involving the skin; sarcoma, developing more slowly and with better prognosis than in women

SMALL DIRECT INGUINAL HERNIA, LIPOMA OF SPERMATIC CORD, HYDROCELE, PARIETAL HEMATOCELE, CYST OF EPIDIDYMIS. Vitrac and Chanaud, *Jour. de Med. de Bordeaux*, Feb. 4, 1912. The patient was a male aged 55, signs dating from 1885. Operation, cure. The main interest attaches to the number of complications.

DESTINY OF SPERMATOOZOA IN CONTINENT ADULTS. Leuret and Esquier, *ibid.*, Jan 28, 1912, deny that spermatorrhœa occurs except after sexual "approach" or a distinct emission. They find in the urine polychromatophile particles which they regard as debris of the heads of the spermatozoa. Brandeis questions whether these are not the initial stage in the formation of spermatozoa, the normal process of maturation not continuing.

NEW INVENTIONS

W. J. Robb and W. H. Welch, Bristol, Eng. Assignors to Banner Motore, Ltd., Bristol, Eng. 1,033,939. Internal Combustion Engine.

Henry Sieben, Kansas City, Mo. Assignor to Fire and Gas Appliance Co. 1,033,958 Gas Controlling Apparatus.

S. S. Wyer, Columbus, Ohio. Assignor to The Jeffrey Mfg. Co. 1,034,053. Gasolene Rock Drill.

G. R. Blair, Topeka, Kansas. Assignor to S. A. Kinne and J. N. Catreu, Topeka, Knsas. 1,034,056. Oil Burner.

W. J. Bergens, Cleveland, Ohio. Assignor to C. L. Terry and J. A. Rommhardt, Cleveland, Ohio. 1,034,204. Thermos-tatic Compound Valve.

G. H. Tomlinson, Chicago, Ill. Assignor to Standard Alcohol Co., New York, N. Y. 1,032,440. Process of Producing Fermentable Sugars from Lignocellulose.

E. P. Thieringer, New York, N. Y. 1,032,518. Nipple Shield.

E. A. Kern, West New York, N. J. 1,032,610. Poison-Indicating Bottle.

Lorenz Ach, Mannheim-Waldhof, Ger. Assignor to C. F. Boehringer & Soehne, Mannheim-Waldhof, Ger. 1,032,642. Tasteless Quinin Compound and Process of Making Same.

C. F. Snyder, Camillus, N. Y. 1,032,712. Rectal or Pile Supporter.

Otto Schonherr and Johannes Hessberger, Fiskaa, Norway. Assignors to Badische Anilin and Soda Fabrik, Ludwigshafen-on-the-Rhine, Ger. 1,032,782. Process and Apparatus for the Production of Compounds of Nitrogen.

J. T. Keough, Los Angeles, Cal. 1,032,840. Vibratory Dilator.

Julius Bueb, Dessau, Ger. 1,032,988. Process for Obtaining Cyanogen and its Compounds.

J. C. Poore, Chicago, Ill. 1,037,309. Nursing Bottle.

Louis Witt, San Leandro, Cal. 1,037,392. Hospital Bed Appliance.

H. J. Collis, Taunton, Mass. 1,037,441. Ankle Support and Protector.

Rudolf Tambach, Ludwigshafen-on-the-Rhine, Ger. Assignor to The Firm of Knoll & Co., Ludwigshafen-on-the-Rhine, Ger. 1,037,685. Case in Derivatives and Process for the Manufacture of the Same.

O. E. Eklund, F. G. Folberth, and W. M. Folberth, San Francisco, Cal. 1,035,954. Inhaler.

Paul Flemming, Hamburg, Germany. 1,036,087. Halogenphenol alkali Salts and Process for the Manufacture of Same.

Herman Haberland and Walter Schaefer, Zacherndorf, Germany. Assignors to The Firm of Salzbergwerk Neu-Stassfurt und Theilnehmer, Zacherndorf, Ger. 1,036,224. Process of Making Penta and Hexachlorethanes.

C. J. Kintner, New York, N. Y. 1,036,262. Syringe adapted to use liquids under pressure.

Jno. T. Davis, Alameda, Calif. 1,023,244. Distillation Apparatus.

Sam'l Morris Lillie, Philadelphia, Pa. 1,023,257. Starch-Conversion Process.

Ralph Scott Swinton, Linden, N. J. 1,023,281. Manufacture of Volatile Organic Acids from their Calcium Salts.

Wm. T. Henderson, Laurinburg, N. C. 1,023,646. Sterilizer.

Mieczislaw Marcks, Lubeck, Germany. 1,023,213. Dental Impression Cup.

Perry S. Bauer, Chicago, Ills. 1,023,236. Adhesive Plaster Spool.

Chancy A. Frees, New York, N. Y. 1,023,247. Artificial Leg.

Herbert A. Pullen, Buffalo, N. Y. 1,023,273. Dental Regulator.

Lillian M. Bender, Seattle, Wash. 1,023,358. Face Mask.

Reinhard Roesch, San Jose, California. 1,023,396. Invalid Bed.

Peter C. McEwen and Fred'k W. Young, Detroit, Michigan. 1,023,435. Hernial Truss Pad.

Robert Wahl, Chicago, Ills. 1,023,448. Manufacture of Fermented Malt Beverages.

Michael E. O'Reilly, Portland, Oregon. 1,023,478. Suspensory.

Ralcy Husted Bell, New York, N. Y. 1,023,499. Collapsible Capsule.

Jean Marie Perigny, Lyon, France. 1,023,528. Manufacture of Cream of Tartar.

Geneva Morgan, Thomaston, Me. 1,023,672. Nursing Bottle Attachment.

Gretel J. Pass, Grenada, Miss. 1,023,677. Toilet Hood.

Jas. Walsh and Robt. Dawson Kay, London, England. 1,023,693. Infant Pacifier.

Ernest E. Adams and Jno. L. Dudek, Schuyler, Nebr. 1,023,705. Pig Forceps.

Arthur Aubriot Pons, New York, N. Y. 1,023,756. Exercising Apparatus.

W. D. Baker, Indianapolis, Ind. 1,036,540. Adjustable Atomizer.

J. A. Coultrup, Colorado Springs, Colo. 1,036,573. Adjusting-Table for Chiropractors.

W. B. Eastburn, Washington, D. C. 1,036,588. Poison-Indicator.

Ernest Hoennicke, Dresden, Germany. 1,036,622. Process for Producing Thyroid-Gland Extracts.

Heinrich Horlein, Vorwinkel, Near Elberfeld, Germany. Assignor to Farbenfabriken vorm. Friedr. Bayer & Co., Elberfeld, Ger. 1,036,624. Phenylethylmalonic.

Heinrich Horlein, Vorwinkel, Near Elberfeld, Ger. Assignors to Farbenfabriken vorm. Friedr. Bayer & Co., Elberfeld, Ger. 1,036,625. Phenylethylcyanoacetic Ester.

P. J. McElroy, Cambridge, Mass. Assignor to The Randall-Faichney Co., Boston, Mass. 1,036,672. Piston for Hypodermic Syringes, etc.

Emil Von Portheim, Prague, Austria-Hungary. 1,036,705. Method for the Production of Anhydrous Hydrosulfites.

Wm. Rintoul and A. G. Innes, Stevenson, Scotland. Assignor to E. I. du Pont de Nemours Powder Co., Wilmington, Del. 1,036,715. Process for Condensing Glycerin.

John Sabo, Cleveland, Ohio. 1,036,785. Depilator.

G. W. White, San Antonio, Texas. 1,036,759. Inhaler.

Ludwig Benda, Frankfort on the Main, Ger. Assignor to Farbwerke vorm. Meister Lucius and Bruning, Höchst on the Main, Ger. 1,036,784. 5 Nitro 2 Aminobenzene 1 Arsinic Acid.

Chas. Blagburn, Antioch, Cal. 1,036,788. Process of Obtaining Substantially Pure Nitrogen from the Air.

Georg Merling and Hugo Kohler, Elberfeld, Ger. Assignors to Farbenfabriken vorm. Friedr. Bayer & Co., Elberfeld, Ger. 1,036,876. Process of Producing Erythrene.

Georg Merling and Hugo Kohler, Elberfeld, Ger. Assignors to Farbenfabriken vorm. Friedr. Bayer & Co., Elberfeld, Ger. 1,036,876. Process of Producing Erythrene.

Carl Mollenhoff, Leverkusen, Near Cologne, Ger. Assignor to Farbenfabriken, vorm. Friedr. Bayer & Co., Elberfeld, Ger. 1,036,880. Production of Alizarin.

Henry Tideman, Menominee, Mich. 1,036,933. Transmitter for the Deaf.

J. D. Knowlton, Westbrook, Me. 1,037,023. Druggist's Device for Dividing Powers.

E. H. Strickler, New York, N. Y. Assignor to General Chemical Co. 1,037,078. Effervescent Compound.

W. R. Archibald, Selma, Ala. 1,037,102. Thermometer-Case.

John Wemer, New York, N. Y. 13,462. Codin Solution.

J. C. Carlson and O. G. Saxton, Easton, Colo. 1,037,864. Surgical Needle Holder.

Wilhelm Ruppel, Höchst on the Main, Ger. Assignor to Farbwerke vorm. Meister Lucius & Bruning, Höchst on the Main, Ger. 1,037,997. Process of producing a Remedy for Tuberculosis.

A. C. Snell, Rochester, N. Y. Assignor to Electro Surgical Instrument Co., Rochester, N. Y. 1,038,011. Tool Holder.

Heinrich Thron, Frankfort on the Main, Ger. Assignor to The Firm of Vereinigte Chinifabriken Zimmer & Co., G. M. B. H. Frankfort on the Main, Ger. 1,038,027. Manufacture of Hydroquinin.

J. F. Kruse, Denver, Colo. 1,038,394. Portable Vapor Bath Cabinet.

Gustave Fernekes, Pittsburgh, Pa. Assignor to J. A. Snee, Elizabeth, Pa. 1,038,546. Apparatus for Producing Formal Dehyde.

Bulletin of the Buffalo General Hospital

VOL. 2

OCTOBER, 1912.

No. 2.

Special Nursing.

The Hospital, on September 1st, returned to the system of nursing in use previous to the adoption of the twelve hour plan for special nursing. While the twelve hour system is still thought to be the ideal plan for nursing, it does not seem, at the present time, to meet the needs of the greatest number who desire the benefits of the Hospital. The Hospital desires that its benefits reach the the greatest number possible, and therefore has returned to the plan which it formerly was practicing.

An Important Publication.

The Buffalo General Hospital is really a large institution, and is doing a tremendous amount of work. Because of its reputation and that of its staff, many cases of extreme rarity or interest find their way into its wards or private rooms. In this respect it is excelled by no institution of its size in the country. The institution has, in time past, partially failed in one important respect,—namely, in the publication of its valuable work to the professional public. Other institutions of much less importance have issued occasional reports, or are issuing annual Medical and Surgical Reports, which often contain case reports of great value. It will be welcome news to the friends of the Buffalo General Hospital, and to the hundreds of students who have studied within its walls, that the Medical Staff is now preparing its first Report of this character, which, when issued, will make a goodly sized volume of three hundred to five hundred pages, freely illustrated, and made up of reports of some of the remarkable cases of recent years, and of papers, by various members of the Staff, based upon experience gained within its limits.

The exact size of this volume will depend much upon the encouragement received from the Alumni and our professional friends generally. It would be most desirable that such a report should appear annually, although its preparation will entail no small labor, especially on the part of the committee entrusted by the Staff with its preparation. It is urged that those who would be willing to contribute either to its pages or to its financial support manifest their practical interest at the earliest pos-

sible date. It is intended that the book shall be as creditable to the institution as is the work which it is expected to record.

Clinical Teaching.

With the opening of the college year in our University formal clinical teaching has begun. So far as possible the work is arranged as follows:—Tuesday and Saturday are intended to be the principal public clinic days, during which operations are demonstrated. The work on Monday and Thursday is rather of the character of ward instruction, which, while even more important, is less spectacular. On Wednesday and Friday there is less of formal clinic work, but there are likely to be just as many operations or even more, especially those of a private character. Public clinics begin at half-past ten a. m., and continue until the work is finished, usually consuming at least two hours and often three. To these clinics all professional colleagues are cordially invited, as, in fact, they are to all surgical teaching in the Hospital, and to such operative work as is not necessarily of private character.

The apparatus for the production of anæsthesia by intratracheal insufflation, which has now been in service for a number of months, and to which reference was made in a previous issue, has given the greatest satisfaction, and is proving itself of the greatest practical value, particularly in operations about the chest, neck and head. When once in operation it is managed with the utmost ease, while the conduct of the anaesthesia is a matter of beautiful simplicity. The patient being relieved from all necessity for disquieting or troublesome respiration, the operator is thereby relieved from most of the anxiety which a conscientious surgeon feels at such a time; moreover, patients come out from under the influence of the anaesthetic, administered in this way, with scarcely any of the unpleasant after effects which seem unavoidable by ordinary methods.

In spite of additions and changes made in the Surgical Clinic the amount of surgical work done in the Hospital is now sufficient to make us feel, at times, uncomfortably crowded. It not infrequently happens that operations will be going on in four different rooms at the same time. This is stated simply to indicate the growth of the institution, and the fact that the adequate comforts of yesterday may become the crowded inconven-

iences of today, as is unavoidably the case in all growing institutions.

During the summer the Nurses' Home has been very thoroughly renovated, through the generosity of Mrs. Hamlin and Mrs. Pardee. Hard wood floors have been laid, walls painted, and the building made bright and attractive throughout. Its housing capacity will be well tested this winter, for the largest class of probationers yet received—twenty-four in number—entered in September.

Dr. Ross gave a paper on "The Use of Salvarsan in Hospitals" at the meeting of the American Hospital Association at Detroit in September.

The maternity service has now fourteen free beds at its disposal. No preliminary arrangements are necessary for admission to these beds, but patients in need may apply in person, or the ambulance will be sent for them. Many critical and difficult cases are brought in on "hurry calls." Every patient receives skillful and conscientious attention.

The Free Bed.

Thirty-eight years ago the first free bed was established at the General Hospital, through the gift of five thousand dollars by Mrs. Lavinia H. Austin. This notable benefaction was followed in due time by two others, of like amount, from Mr. James N. Matthews and Mr. Arthur McArthur, respectively, and in 1884 was founded the first free bed for children, through a bequest of three thousand dollars from Mrs. J. B. Skinner. This was a peculiarly appropriate gift. Mrs. Skinner had been an especially valuable friend of the Hospital, and was for many years president of the Ladies' Board, which had first urged the establishment of a children's ward. Soon after this the Sunday Schools of Trinity and the First Church gave each three thousand dollars to endow a bed in the children's ward, and so appealing is this form of endowment, in general, that the General Hospital has now eighteen such permanent foundations. This does not include the maternity service, which is supported by yearly gifts. In 1905 the uniform endowment of five thousand dollars was established for the free bed.

The devoted workers for the hospital, in its early days, would have considered such provision in this direction as the institution now enjoys lavish indeed—but what does this equipment mean today, in power to meet the needs which it is supposed to serve? In 1874, when Mrs. Austin made that important initial gift, five thousand dollars yielded \$350.00 a year; the weekly cost per patient was \$7.15; the bed was therefore self-sustaining for forty-eight weeks and a fraction—practically the entire year. In 1884, when the first three thousand dollar bed was established, the income from it was at least \$180.00 a year, and the weekly cost per patient was \$7.00. Those were the happy housekeeping days when eggs were unconsidered trifles, and milk cost the hospital one dollar a year for each patient. Today, five thousand dollars yields about \$240.00, and the weekly cost per patient has risen to \$11.65. The bed can be “warm,” without cost to the hospital, for less than half the year.

This shrinkage is due not only to the two causes already indicated, sadly familiar to the outside world as well, but to the revolution in hospital procedure in the last twenty-five years. When, for instance, the surgeons put on rubber gloves, they reduced the mortality rate, but increased the annual expenses by about \$1,000—the cost of living, as it were.

And yet the free bed is now at its highest social value. The peculiar aid which it renders to the worthy poor we all recognize; they never needed its assistance more; while in the new struggle with destructive forces in which society has engaged it is a potent instrument. Through it many a stream of disease and vice is checked, when by no other means could the delinquent or the victim be reached. Every hospital could report tangles of vice, degeneracy and criminal irresponsibility, where the free bed cleared a little space in the wretched welter, and by so much served the public welfare.

That Hospital Deficit.

The International Hospital Record stated in a recent issue that the current expenses of forty-five hospitals in New York City have this year exceeded their annual income “from invested funds, paying patients, and city appropriations by about \$1,500,000.” The Record goes on to say that “the wonder is, with operating expenses increasing so heavily, and also the living expenses of the general public, that many hospitals, not alone in New York City, but elsewhere, are not compelled either largely to limit their charity, or to close their doors.”

It is surely the business of a hospital to live within its income, or at least within its reasonable expectation of income; yet few persons realize what conditions a hospital has to meet. Let us cite a few examples.

In one of our wards is a woman who entered as a county case a year and a half ago. As the time approached for her discharge the social workers did all in their power to induce her relatives to give her a home, for she was helpless for life. Her disease had necessitated the amputation of both legs. At last one of her sisters consented to receive her, and the ambulance took her off. But the interval, though brief, had been fatal. When the sister's home was reached, they found that she had locked the door and beat a thrifty retreat. The attendants, having marched upstairs with their patient, had no alternative but to follow a famous historic example and march down again. At this writing, the patient is still in the hospital, entirely a charge upon its resources, the county having refused to carry her any longer.

Not long ago a man was brought in from the country, badly burned. He had neither friends nor money, and had been in this country so short a time that he had no claim on the public funds. He was cared for until he was on his feet again. A similar case was of a woman who had been in this country but a short time, and was brought to the hospital for a serious operation. She, too, was entirely without resources, and was of a kind to feel her friendlessness keenly. During her convalescence work was found for her which was much better than that which she had had before, and she left the Hospital declaring that the misfortune which took her there was the luckiest thing that ever happened to her.

A young woman suffering from tubercular spine was brought to the hospital. She, too, had been here too short a time to receive public assistance. She was taken care of for almost four months.

In none of these cases could the Hospital, in humanity, have done less. Yet for the last three patients it received no compensation whatsoever; for the crippled woman nothing was received for some months, while for the remainder of the year and a half the county paid for her \$5.50 a week. The weekly cost per patient this year, it will be remembered, is \$11.65. Here we see, in large measure, the stuff of which hospital deficits are made. We see also that they are involved with one of the urgent public questions of the day.

BUFFALO MEDICAL JOURNAL

A Monthly Review of Medicine and Surgery

EDITOR

A. L. BENEDICT.

All communications, whether of a literary or business nature, books for review and exchanges, should be addressed to the editor, **228 Summer Street, Cor. Elmwood Avenue, Buffalo, N. Y.** **Subscribers, advertisers and exchanges please revise address.** Please make personal or telephonic calls before 1 p. m.

THE BUFFALO MEDICAL JOURNAL will publish regularly, full transactions of any professional organization in western New York at cost. Personal notices, brief reports of society proceedings, and the like, are always welcome and will be published without charge.

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No. 3

Ethics is squareness with the corners projecting.

Vivisection Legislation.

Several bills were presented in the New York legislature during the last session, aiming to regulate vivisection, but none was passed. Without pretending to statistic accuracy, the attitude of the antivivisectionists may be gauged by the fact that one or more bills of this nature have been at least prepared for presentation and usually have reached committees, at nearly every session of the legislature, for the last ten years. Many of these bills seem to have been prepared in a conservative and sincere spirit and would appear reasonable to the majority of persons not impressed with the necessity of leaving scientific investigators absolutely unhampered. We cannot help thinking that the attitude of the profession in antagonizing such legislation, may eventuate in the passage of a drastic bill which will seriously impede scientific investigation and even the practical development of diagnostic and therapeutic measures which depend on no more suffering of animals than their utilization for ordinary economic purposes.

It is in no spirit of hostility to scientific and humanitarian progress, therefore, that we venture to suggest that it might be wise to cooperate with the framer of the next conservative bill, insisting on proper professional representation and control on whatever board of inquiry or of regulation is provided, and suggesting such modifications as may be necessary.

This is a legislative age. Rightly or wrongly—and we may confess to the personal preference for the latter word—the legislative and legal idea, with popular approval, seems to be to codify our method of dealing with every problem that has arisen or may arise. For example there is already under way, a considerable mass of laws, national and international, dealing with aerial navigation and providing for details that, five years ago would have been considered ridiculously impossible and that are still far from practical realization. Vivisection is obviously a practice that is subject to abuse and which has, indeed been abused in the past. It is, therefore, a matter on which the legislative spirit of the age almost inevitably will demand legislation. The present general law regarding cruelty to animals is entirely satisfactory to the medical profession. If we look at the question impartially, we must admit that the law is satisfactory because it is absolutely inefficient, so far as professional vivisectors are concerned. It is conceivable that, under the present law, a perfectly proper and even painless experiment by a professional student or teacher without a medical degree, might be ruled to be a punishable offense. It has been stated by some critics, viewing the present law from the legal side, that it would be possible to punish a physician, engaged in scientific investigation of the highest order, operating with an adequate equipment, and taking every precaution against the infliction of pain, if he were not connected with some chartered institution; and that, on the other hand, the most wanton cruelty and neglect, even sadism, on the part of a worker in an institution, would be unpunishable. We are inclined to doubt, however, whether this technical possibility of miscarriage of justice, would ever occur.

However, if susceptible to such construction, even in theory, the present law should be modified in the interests of independent investigators, with or without a medical degree, the sole requirement being a reasonable standard of establishing competence and good faith. On the other hand, it is doubtful whether any future law on vivisection can be so worded as to exempt professional vivisectors from supervision. Such exemption would be contrary to precedent. For example, the liquor law does not exempt professional dealers in liquor; the laws regarding the use of highways do not exempt chauffeurs; in general, laws are made to apply to the persons engaged in the practice which is the subject of regulation.

Shall the profession seize the opportunity to secure a reasonable law by friendly if not entirely complaisant cooperation, or shall it simply obstruct and run the risk of serious interference with scientific and humanitarian advance?

The Importance of Clinical Study of the Lower Animals.

Our attention has been called anew to this subject by a remark of Dr. Aristides Agramonte, that yellow fever was solely a human disease and that it concerned merely man and the stegomyia. Certain observations as to the date of infectivity of this mosquito after drawing blood from a yellow fever patient, render it probable that the former must actually contract the disease before spreading it. While it is ludicrous to think of the stegomyia as a patient attended by physicians carefully noting symptoms, a little reflection will convince us that if we really could determine the clinical progress of yellow fever in the mosquito, or if, on the other hand, we could definitely declare it to be in normal health after drawing infected blood, we should undoubtedly be much nearer the discovery of the ultimate germ and we should also be much better prepared to prevent the development of human cases.

Veterinary medicine does deal with the clinical side of disease in a number of lower animals, valuable commercially or invoking the aid of their masters as domestic pets. But the clinical study of disease in the lower animals might be of much greater service to science and to humanity if carried on systematically without regard to size, number of legs and presence of a backbone. Certain forms of clinical study have proved of value in the detection of tuberculosis in bovines, tetanus in horses, rabies in dogs, etc.; trichinosis in swine. Bovine variola—vacinia—is a disease of transcendent importance. It is not impossible that a thorough study of grease and of ovine variola might develop further aids to prophylaxis and even therapeutics of human variola. The detection of trichinæ by routine post mortem microscopic examination—the details being mainly in the hands of comparatively untrained assistants—does not impress us as very reliable. It is possible that purely clinical observation of swine, ante mortem, might prove more reliable. There is unquestionably more or less danger of tuberculous infection from cats and dogs; considerable danger from monkeys and guinea pigs; possibly some from pet birds. In the case of mammals, it would seem that barring the hair which can easily be shaved off, pulmonary tuberculosis could be diagnosed at least as easily as in human infants. The spread of diphtheria from cats is established, yet actual clinical diagnosis is almost never employed. Recently, attention has been called to the possibility of anterior polio-myelitis in domestic animals and we have personally heard a report, from lay sources, it is true, of fairly typical infantile paralysis in a kitten. Some years ago, long before the

treponema was known and when syphilis was regarded as a purely human infection, we attended a man with tertiary syphilis. His pet cat used to eat meat which the master had chewed and spit out. The cat had the typic raucous voice, falling of hair and glandular swellings of human syphilitics and was said to have passed through the ulcerative stage. At the time, we considered it a joke to say that the cat was syphilitic. In the light of recent discoveries, we are by no means certain that the condition should not have been taken seriously.

None of the modern vaccinations are closely analogous to antivariolar vaccination either in probable detailed explanation nor in protective power. In other words, there is no other instance known of a corresponding naturally mitigated animal disease which will protect against the human infection. All of the other exanthemata appear to be closely analogous to small pox. If somewhere in the animal kingdom not necessarily among mammals nor even vertebrates, a vaccination against scarlatina could be found, no one would laugh at a clinical study of disease in lower and even minute animals.

With the rapid extension of lodge practice, contract practice, Health Board, hospital and dispensary abuses it is becoming more and more difficult for physicians to make a living. It is time that we look the situation square in the face and consider what is best for the profession instead of holding up our hands in horror and shouting, "It is not ethical," when one mentions the business side of medicine.

Those who hold up their hands in horror are those who are well established or have made their "pile" and they do not need to think about the financial side of the practice of medicine. They are selfish and do not concern themselves about the welfare of the profession.

CHARLES HAASE.

PERSONALS.

Dr. Edward S. Bogert of the U. S. Navy, has been assigned to temporary duty at the Buffalo station, vice Dr. Andre E. Lee who was transferred to Peking, China.

Major Wm. G. Bissell of the 74th Regiment, Buffalo, has been designated to attend the meeting of the Association of Military Surgeons in Baltimore, Oct. 1.

The Board of State Examiners with regard to castration of criminals and defectives consists of Dr. Charles H. Andrews of

Buffalo, surgeon; Dr. Lemon Thompson of Glens Falls, Neurologist; Dr. Charles G. Duryes of Schenectady, general practitioner. An organization meeting was held Sept. 4 and 5 and the board will begin its work promptly by an inspection of the institutions in the eastern part of the state. We refrain from the two obvious puns.

Dr. E. W. Mulligan of Rochester, has moved from 318 to 788 East Ave.

Dr. Arthur Gillette of New York, was the guest of Dr. H. F. Gillette of Cuba, in September.

Dr. M. B. Shaw of Eden, has returned from a trip to Chautauqua.

Dr. O. S. McKee of Buffalo, went to Duluth by lake in September.

Dr. A. W. Bayliss of Buffalo, sailed for France, Aug. 31.

Dr. A. B. Knisley of Buffalo, returned Sept. 1, from a trip to the Thousand Islands and Quebec.

Dr. Francesco A. Valanti, who has recently returned from a visit to Europe, has located at 571 Elmwood Ave., Buffalo.

Dr. J. A. Rafter, formerly on the editorial staff of the BUFFALO MEDICAL JOURNAL, has been nominated as Democratic candidate for Mayor of North Tonawanda.

Dr. Henry Smoyer, a graduate of Niagara University, 1895, has been similarly endorsed for City Treasurer of North Tonawanda.

Dr. William Van Russell Blighton of North Tonawanda, has been nominated as Representative in Congress by the Prohibitionists.

Dr. L. Bradley Dorr, Councilman in Buffalo, has become a Bull Moose and very honorably declares that he will resign if the forthcoming vote indicates an opposition to the change.

Dr. John O. Roe of Rochester, announces his removal to 64 Clinton Ave., South, in association with Dr. Bradford A. Richards. Dr. Roe also sends a very welcome commendation of the growth of this JOURNAL.

Dr. Thomas J. Walsh of Buffalo, will spend the coming fall and winter in study in Germany.

Dr. Frederick Frisch who moved from Buffalo to Atlantic City, last year, visited his old home in September.

Drs. C. F. Chaffee and Robert T. French of Rochester, have recently sustained fractured wrists from cranking automobiles. Dr. N. D. McDowell of Rochester, sprained his wrist in the same way.

Dr. E. H. Wolcott of Rochester has returned from a vacation in the White Mountains.

Dr. C. Wentworth Hoyt of Rochester, left for an extended European trip the middle of September.

Dr. F. W. Zimmer of Rochester, has recently returned from a trip in the St. Lawrence region.

Dr. E. W. Mulligan of Rochester, returned early in September from a camping trip of several weeks in Algonquin Park, Canada.

Dr. W. H. Marcy of Buffalo, returned early in September from Webster, Mass.

Dr. C. B. Knowlton of Buffalo, camped at Elton, N. Y., during August.

Dr. Eli H. Long of Buffalo, announces the removal of his office from 1335 to 1339 Main St.

Dr. Herbert Upham Williams of Buffalo, has returned from the White Mountains.

Dr. Thomas E. Soules has moved his office from 915 Main St. to 55 Allen St., Buffalo.

Dr. Thomas A. Hicks and Dr. James R. Hicks have moved their offices from Franklin St. to 55 Allen St., Buffalo.

Dr. F. E. Fronczak, Health Commissioner of Buffalo, has returned from the American Congress of Hygiene and Demography at Washington.

Dr. Max Breuer of Buffalo, has returned from Europe.

Dr. Geo. A. Himmelsbach of Buffalo, has returned from Europe.

Dr. Fred J. Parmenter of Buffalo, spent two weeks in the Canadian forests during September.

Dr. W. Scott Renner of Buffalo, has returned from Europe.

Dr. Lawrence Hendee of Buffalo, spent September on Fourth Lake.

Dr. Carroll L. Roberts of Buffalo, has returned from a fifteen-months' study tour of Europe.

Drs. James A. Gardner and James B. Cross of Buffalo, have opened their new office in suite 504, General Electric Building.

Dr. W. H. Woodbury of Buffalo, has returned from Europe.

Dr. Sherman Voorhees of Elmira spent the last half of August in Boston and Bar Harbor.

Dr. Charles F. Abbott of Elmira has returned from a trip to New York and Philadelphia.

Dr. J. A. Lichty of Pittsburg, called on the editor Sept. 11.

Mr J. C. Bradley has retired from the position of Manager of the Denver Chemical Manufacturing Co. He is succeeded by Mr. Harold B. Scott, a Yale graduate who has had a wide varied and successful business experience. We wish to express our appreciation of Mr. Bradley's many courtesies and to extend to him our best wishes. And, to Mr. Scott, we extend our greeting and congratulations—as also to the firm.

H. R. Carson, Sc. M., Ph. G., M.D., of Northwestern University, will assist Dr. J. E. Walker at the Steuben Sanitarium, Hornell, N. Y. Dr. Carson was an interne at St. Luke's Hospital, Chicago, and was engaged in practice in the same city. He comes into our territory highly recommended.

Dr. James S. Porter of Buffalo, has returned from a fishing trip at Burlidge Falls, Ont.

Dr. George W. Batt, formerly of 441 E. Genesee St., Buffalo, has taken the office of Dr. Roy J. Juhre at Hinsdale. Dr. Juhre has returned to Buffalo, where he expects to open an office soon.

OBITUARIES.

Dr. Joseph N. Strange (licence, Arkansas, 1903 of Hartford, was shot and killed in a pistol duel in Hartford, Aug. 24, aged 45 *Jour. A. M. A.*) And this is 1912.

Dr. Pardon Leland Kimball, Buffalo, 1880, a Civil War veteran who had practiced in Illinois and Iowa, died this summer at his late residence in Long Beach, Calif., aged 71.

Dr. Charles Richards, Buffalo, 1904, of Sturgis, S. Dak., died of nephritis at his home, Aug. 4, aged 40.

Dr. Stanley Hunter Darlington, Buffalo, 1902, a resident of Buffalo but not listed in the medical directory, died Aug. 18, aged 35.

Dr. Earl Philip Warren, P. & S., 1902, of Niagara Falls, died of ptomain poisoning following typhoid, Aug. 12, aged 39.

Dr. Wellington Prosser, a retired physician of Olean, died suddenly of apoplexy, Aug. 24, aged 78.

Dr. W. J. McGee, the distinguished geologist and ethnologist died in Washington, Sept. 4, aged 50. His wife, Dr. Anita Newcome McGee was the only woman holding a commission in the U. S. Army. Dr. McGee left his body to Dr. Edward A. Spitzka, of Jefferson Medical College. His brain weighed 1410 grams, slightly above the average. We had met Dr. McGee a number of times in connection with archæologic matters and the mutual lack of front names immediately established a tie that developed into a warm personal feeling, in addition to the respect due to his scientific attainments.

CORRESPONDENCE.

Dr. A. L. Benedict,
228 Summer St.

My dear Doctor:—In the last issue of the *BUFFALO MEDICAL JOURNAL*, you ask for information regarding periodically reappearing dermal marks.

I am well acquainted with a young man who has an oblong, vividly red mark, about the size of a five-cent piece on the inner aspect of his knee. This mark promptly makes its appearance in June of every year and just as promptly disappears about the beginning of September. The mark is probably of angiomatous origin and akin to a *nævus flammeus* or "port-wine" mark.

This young man's mother states: that during her pregnancy with this child, she had an inordinate craving for water-melon, and reasons that the mark on her son, "is the mark of a water-melon seed and therefore only appears during the water-melon season."

Sincerely,

JULIUS RICHTER.

Sept. 12, 1912.

SOCIETY MEETINGS.

NEW YORK AND NEW ENGLAND ASSOCIATION OF RAILWAY SURGEONS.—The twenty-second annual session will be held at the Hotel Astor, New York City, on Wednesday, November 15. An interesting program has been arranged. Dr. John B. Murphy, of Chicago, will deliver the "Address in Surgery." Railway surgeons, attorneys and officials and all members of the medical profession are cordially invited to attend.

Dr. Walter Lathrop, President, Hazelton, Penna. Dr. George Chaffee, Corresponding Secretary, 338 Forty-seventh Street, Brooklyn, N. Y.

THE NURSES' ALUMNAE ASSOCIATION OF THE CHILDREN'S HOSPITAL, Buffalo, at its meeting of Sept. 10, decided to incorporate. Meetings will be held on the second Tuesday of each month except July and August. Four of the meetings will be social, when the members of the training school will be entertained. Progress in medicine, surgery and nursing, will be considered at the other meetings.

THE BUFFALO DENTAL ASSOCIATION held its dinner and scientific meeting at the Hotel Statler, Sept. 10. Dr. Francis E. Fronczak and Alderman Staples were guests of honor. The matter of dental inspection of school children, which was voted down by the common council last spring, was brought up anew and it is hoped that this important reform will be carried through.

THE NATIONAL ASSOCIATION FOR THE STUDY OF PELLAGRA holds its second triennial meeting at Columbia, S. C., Oct. 3 and 4.

42 papers are scheduled beside as many more not designated by title. We cannot refrain from suggesting that, for any meeting, the incisive should not so far exceed the molar capacity.

THE AMERICAN ASSOCIATION FOR THE STUDY AND PREVENTION OF INFANT MORTALITY will hold its third annual meeting at Cleveland, Oct. 2-5. As is obvious from the duration of the meeting this association includes educators and sociologists as well as physicians and will discuss various phases of infant welfare not technically medical.

THE EIGHTH DISTRICT BRANCH OF THE MEDICAL SOCIETY OF THE STATE OF NEW YORK met in Buffalo, Sept. 24 and 25. The afternoon session on the first day was devoted to business, President's address by Dr. Henry A. Eastman of Jamestown, Remarks on Some of the Needs of the State Society by Dr. John F. W. Whitbeck of Rochester, and scientific papers. The morning of the second day was devoted to ambulatory and surgical clinics by Buffalo men. A dinner and luncheon were served at the University Club. The meetings were held in Alumni Hall of the University of Buffalo. Our readers will appreciate the fact that meetings occurring later than the 20th of any month cannot be adequately reported till the second month, when, often, the proceedings are too well known to be news.

THE CHEMUNG CO. MEDICAL SOCIETY held its first fall meeting at Elmira, Sept. 17. Dr. Anna Stuart read a paper on the N. Y. City Health Dept. and Dr. C. R. Jennings on the Treatment of Inoperable Carcinoma.

THE HOMOEOPATHIC MEDICAL SOCIETY of the State of New York will meet at the Lafayette Hotel, Buffalo, Oct. 8 and 9, under the presidency of Dr. Willis B. Gifford. Various entertainments have been planned in addition to the scientific program, the entertainment committee consisting of Drs. Critchlow, Maycock, Moseley, Pinkerton and Case.

BOOK REVIEWS

TRESPASSERS KILLED ON THE RAILROADS—WHO ARE THEY? By *Frank V. Whiting*, General Claims Attorney, N. Y. Central Lines; pamphlet issued by General Safety Agt.

In 1911, 10,396 persons were killed by American railroads. Of these, a trifle over half, 5,284, were trespassers and, of the trespassers, about 80% were killed while walking on or crossing tracks. The vast majority of trespassers killed are men—96.5%

REPORT OF THE COMMISSIONER OF EDUCATION (U. S.), for the year ended June 30, 1911. Government Printing Office.

This is a very interesting compilation of statistics of various kinds. As bearing on the prevalent hard times, it may be noted that more than 10% of youths of high school age and a little over 2.5% of those of college age are students. About $\frac{1}{2}$ % more are in training as teachers and nearly another half per cent. are studying for some professional career. These proportions are approximate as there are no definite statistics indicating the number of persons of any single age-year.

13,585 men and 7,882 women received bachelors' degrees in 1911, 2,231 men and 689 women received masters' and doctors' degrees on examination. These figures refer to purely educational courses, not to those in professional courses nor in engineering and various minor professional courses such as music, architecture, library work, etc. This is a good showing if the men and women who have protracted their schooling to the age of 22-30 before getting to work, have minds worth cultivating to this degree and if the country needs so large a number of highly trained intellects. But, to support one person in eight or ten up to the age of 18, one in 35 or 40 up to the age of 22; and about one in 50 up to the age of 25 or 30 is a considerable economic handicap.

THE SHAKESPEARE MYTH by *Sir Edwin Durning-Lawrence*, pamphlet of 32 pages, illustrated, published by Gay & Hancock, London.

This contains many interesting reproductions of old prints and a resume of the familiar veiled allusions, by numbers, puns on the name of Bacon in the Shakespearian plays, acrostics, and hidden references in contemporary literature, including Bacon's acknowledged works, which an enthusiastic school of critics have assembled to prove the Baconian authorship. All we have to say on the matter is that there is no analogue in all literature of the production of so much material and of so high grade, both absolutely and relatively to the stage of linguistic and literary development at the time, by a single author, to what are commonly regarded as Shakespeare's writings. It is admitted almost unanimously that these writings were by a single author. Some one accomplished this unprecedented task. If it were not for the actual existence of the matter, unquestionably dating to the time of Shakespeare and Bacon, everyone would declare the production of such a mass of literature impossible. If the Shakespearian literature had been presented to the world anonymously, during Shakespeare's lifetime or at any subsequent period and the literary world had been asked to guess what Englishman of

the period composed it, the nearly unanimous vote would have been for Bacon. Shakespeare is known to have been a real personage. Excepting a few ancient authors of rather dubious individuality like Homer, there is none in all history who has left as little of his personality and influence aside from his reputed plays, as Shakespeare. So much for the Baconian claim. On the other hand, to ascribe to Bacon the Shakespearian works as well as all his other activities involves quite as much of a miracle as to suppose that they emanated from the otherwise comparatively unknown and unlikely source of Shakespeare himself. The method of "proof" of the Baconians strikes us as puerile, no better in fact than the method proving anything desired from the Bible by putting together bits separated by centuries of time, without regard to context. Anyhow, Bacon had his chance to claim authorship and, if for hygienic motives, he withheld his claim during his life, he might at least have left a memorandum or confided his secret to a friend. If he chose to create the literary side of Shakespeare, the self-effacing citizen of Avon and modest actor, we shall respect his wishes. Beside, we don't want to establish a precedent for the posthumous killing of Galen, Aesculapius and Hippocrates.

Gould & Pyle's *Cyclopædia of Practical Medicine and Surgery with Particular Reference to Diagnosis and Treatment*. This was reviewed in the September issue but the publisher's name was omitted:—P. Blakiston's Son & Co., of Philadelphia.

MISCELLAEY.

A story is being printed in some of our western exchanges, about a farmer who went to the city for a week's recreation and who became greatly interested in a melodrama. On the fourth consecutive evening that he had attended the play, the manager expressed his appreciation of his approval but advised him to go somewhere else and see something different. "Not on your life," replied the visitor. "You know the end of the second act where Don Juan Montague jumps out of the window just before the unexpected return of the husband? Well, some night, that cuss is going to get caught and I want to be there to see the fun."

Probably among the doctors who have laughed at this story—and at the Jay—are 57 who have been putting in from five to ten years hard work, doing the same show over and over again, expecting to be overtaken by a promotion that was just exactly as likely to do so as the injured husband in the melodrama was likely to catch the villain—and for exactly the same reason, that the whole thing had been carefully rehearsed.

BUFFALO MEDICAL JOURNAL

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No. 4

Immunity

With Reference to Some of Its Relations to Surgery

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By LUDVIG HEKTOEN, M. D.

Director of the Memorial Institute for Infectious Diseases
Chicago

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ISOAGGLUTINATION IN RELATION TO TRANSFUSION OF BLOOD.

We usually think of the antibodies of an animal as directed against cells and proteins that are quite foreign to the species to which the animal belongs. The blood of a normal animal may contain, however, antibodies for the red corpuscles of other members of the same species, and we speak of these bodies as isoagglutinins, isolysins, isopsonins. Such isoantibodies occur in human blood and on account of the significance this may have in direct transfusion, which is being practiced quite extensively, a brief review of the chief facts seems warranted. At present individuals may be separated into four distinct groups on the basis of isoagglutination.—Ottenberg.

Group 1.—The serum agglutinates the red corpuscles of the other three groups; the corpuscles, however, are not agglutinated by human serum.

Group 2.—The serum agglutinates the red corpuscles of groups 3 and 4, and the corpuscles are agglutinated by the serum of groups 1 and 3.

Group 3.—The serum agglutinates the corpuscles of groups 2 and 4, while the corpuscles are agglutinated by the serum of groups 1, 2, and 4.

Group 4.—The Serum does not agglutinate human corpuscles, but the corpuscles are agglutinated by the serum of the other groups.

The agglutinative peculiarities of each person appear to be quite permanent. It is said that in their transmission from generation to generation they follow Mendel's law. The observations at hand indicate that approximately 50 per cent. of all persons belong to the first group, 30 per cent. to the second group, 18 per cent. to the third, and 2 per cent. to the fourth. Isolysins

appear to occur in about 25 per cent. of adult persons, the relative frequency being the same in health and disease, but no such grouping has been worked out for isolysis as for isoagglutination.

Now the question of practical interest is whether indiscriminate transfusion from man to man is at all in any way dangerous on account of the occurrence of isoagglutination or isolysis within the vascular system of the recipient, Crile² who has done such excellent work on transfusion expresses the opinion that there is practically no danger on this account; in a large number of transfusions he has seen only one instance of any indications of hemolysis. Cases are described, however, in which transfusion has been followed by untoward symptoms, and even by death, in the production of which there is good reason to believe that hemolysis and agglutination took part. Pepper and Nisbit³ report that in a case of severe anemia from bleeding of the gums, two transfusions, each from a separate donor, were made 48 hours apart; soon after the second transfusion jaundice and hemoglobinuria developed, and the patient died in a few days. In this case there was possibility for interaction on part of the blood from three individuals. Hopkins⁴ in a case of severe anemia of the pernicious type, practised transfusion with a blood, the corpuscles of which were agglutinated by the serum of the patient; immediately after the transfusion, which lasted half an hour, the patient became irrational and comatose with hemiplegia, and died after nine hours. In this case phagocytosis of red corpuscles by leukocytes was observed in the blood, and after death the serum of the patient did not agglutinate the corpuscles of the donor, indicating that the agglutinins had been absorbed by the transfused corpuscles. Is it not highly probable that death in this instance resulted from intravascular agglutination? After intravenous injection of 50cc. of blood, the corpuscles of which were agglutinated by the serum of the patient, Schultz⁵ saw collapse with loss of consciousness, vomiting and diarrhea, fever and edema of the hands and feet. Ottenberg⁶ mentions that in two transfusions of blood, the corpuscles of which were agglutinated by the serum of the recipient, there was phagocytosis of the red corpuscles in the circulation; in one of these instances the agglutinin of the patient's serum disappeared probably from

² Hemorrhage and Transfusion, 1909.

³ A Case of Fatal Hemolysis following direct Transfusion of Blood by Arteriovenous Anastomosis. Contrib. from the Wm. Pepper Laboratory of Clinical Medicine, 1907-8, 6.

⁴ Arch. Int. Med., 1910, 6, p. 270.

⁵ Ueber Bluttransfusion beim Menschen unter Berücksichtigung biologische corprüfungen. Berl. Kl. Wehnsehr., 1910, 47, p1407.

⁶ Transfusion and the Question of Intravascular Agglutination, Jour. Exper. Med., 1911. 13, p. 425.

Also private communication.

absorption by the transfused corpuscles. Both the patients died but whether from effects of the transfusion is uncertain.

From the facts at hand it seems to me that the possibility of isohemolysis and of isoagglutination must be taken account of in transfusion. It is true that homologous transfusions rarely have been followed by untoward symptoms even though the blood concerned in many cases must have been agglutinative and lytic; this no doubt depends in part on there being perhaps too little agglutinin and on the excess of agglutinable cells as would be the case especially when the donor's serum is agglutinative for the patient's corpuscles. The most dangerous combination is illustrated by the cases recited, namely agglutination of the donor's corpuscles by the patient's serum; now if isolysis were added the dangers would be increased. As no surgeon would wish to take any chances in matters of this nature, the donor in transfusion better be selected by appropriate tests. The donor should be of the same agglutinative group as the patient; there should be no isolysins in the bloods. In some hospitals tests of this kind⁷ are made for all transfusions. Corpuscles agglutinated by the recipient should be avoided also because they appear to be readily taken up by the leukocytes and removed from service. As Richard Lower expressed it in 1665, transfusion should be practised in order if possible that those who "want blood or have corrupt blood may be supplied from others with sufficient quantities and such as is good." In urgent cases when the donor cannot be selected by proper tests, the possible dangers of transfusion must be balanced against the dangers of the condition without any transfusion.

ALLERGY.

From all that has been said we naturally would expect that the protective reactions induced by an antigenic substance would be stimulated and reenforced on the reintroduction of the antigen, but it would seem, at any rate at first glance, as if under certain circumstances this is not the case because peculiar, often violent, and even fatal symptoms may set in when the antigen in question is introduced again. This phase of immunization has been studied very actively of late under the headings of anaphylaxis (Richet), which means the reverse of prophylaxis, of hypersusceptibility, and of allergy (v. Pirquet) which means changed reactivity and which in my opinion is the most desirable designa-

⁷ The tests may be carried out by mixing say .1 cc. of serum with .1 cc. of a 5 per cent. suspension of corpuscles and adding salt solution sufficient to make .5 or 1.0 cc. in all. The tubes are incubated at 37d. C. for two hours. At this time it can readily be seen whether any laking has occurred; agglutination when present is recognized by the clumping and irregular sedimentation of the corpuscles. The serum of the prospective donor must be tested with corpuscles of the recipient and the serum of the recipient with the corpuscles of the donor.

tion. On account of the importance which allergy now occupies in diagnosis and in our conceptions of the intimate processes of infectious and other diseases, I have deemed it well to review briefly some of the chief facts in regard to its nature and its manifestations.⁸

THE EXPERIMENTAL BASIS.

It would not be feasible to go into details in regard to the vast amount of work on the results of which rests our present understanding of allergy. As a rule an animal, once thoroughly subjected to the influence of a foreign protein, be it of vegetable, animal, or bacterial origin, but which must be introduced as such into its blood or tissues, develops a condition which manifests itself by special symptoms when the protein is reintroduced. It takes some time, at the very least a few days, for this condition to develop; gradually a maximum intensity is reached after which there is a slow return to the normal, a curve being traced that is like the antibody curve. Allergy may be established with respect to many protein substances, notably serum, bacteria and their derivatives, milk, egg-white, red corpuscles and various more or less pure proteins. These are all substances with antigenic powers and the allergic reactions follow the same laws as to specificity as antibody-antigen reactions in general. A passive allergy, analogous to passive immunization, is obtainable by the injection of a normal animal, particularly the guinea-pig, with the serum of animals or persons already allergic or sensitized, (Gay and Southard, Otto) and this transferred condition is specific in the same way as the allergy of the donor. This demonstration, which clearly shows that allergy depends on specific substances in the blood, is the basis of the conception of the nature of allergy which now prevails, namely that on the introduction of the antigen new substances, antibodies of the general structure of amboceptors, are developed, which unite the complement with the antigen, the complement by virtue of its digestive powers now setting free substances that in proper concentration can cause the symptoms of allergy. In other words, the action is regarded as one of specific proteolysis in the blood and tissues, the toxic substances thus produced being split-products or possibly preformed poisons (endotoxins) that are set free. Substances causing the general symptoms of anaphylactic or allergic intoxication in guinea-pigs are obtainable *in vitro* by splitting up bacteria and egg-white with chemicals (Vaughan); by the action of allergic or immune serum and complement on

⁸ For a more detailed discussion of allergy, see my paper in *Jour. Amer. Med. Assn.*, 1912, 53, p. 1081.

the corresponding antigen (Friedemann, Friedberger); by the action of complement on the precipitate produced in serum by specific precipitin (Friedberger); and by letting bacteria like the pneumococcus, the gonococcus, and the like, digest themselves (Rosenow). At present then, our explanation of the phenomena of allergy centers about the view that parenteral protein digestion plays the essential part in their production, the digestion being accomplished by an amboceptor-complement mechanism.

The symptoms of the allergic reaction may vary a great deal depending on the species and also on the quantity of toxic substances. In the guinea-pig the reinjection of the antigen may give rise to explosive symptoms, death resulting in a few moments from asphyxia due to spasm of the bronchi; when death does not occur immediately there is a marked fall of the temperature, and when the reaction is very mild there may be fever. In dogs a noteworthy result is marked fall of blood pressure due to splanchnic action, and in rabbits occur respiratory disturbances, prostration, and a cardiac rigor; sometimes local changes of edema and necrosis develop. Common in all these conditions is temporary loss of complement, loss of coaguability of the blood and leukopenia.

ALLERGIC PHENOMENA IN MAN.

A variety of allergic phenomena occur in a man. In the first place the injection of therapeutic serum in highly exceptional instances may cause severe dyspneis symptoms not unlike those observed in the acute reaction in guinea-pigs; just how sensitization has occurred in such instances is still a matter of speculation. More familiar is the reaction called "serum-disease" which sometimes appears from 8-12 days after the injection; in this case we assume that part of the serum remains unchanged until enough antibody has developed to cause a sharp reaction. If serum is reinjected after some time, thus reproducing the experimental conditions, the reaction may develop almost immediately or after three or four days. The symptoms are familiar; urticaria, edema, articular pain, swelling of the lymph nodes, leukopenia, fever, weakness, and sometimes collapse. In the second place, human diseases present a rich field for the study of allergic phenomena to some of which attention may be directed for a few moments. In infectious diseases, especially those which do not, like diphtheria and tetanus, depend practically altogether on the secretion and absorption of typical toxins, there is much to indicate that many of the symptoms result from the interaction of the antibodies of the host and the microbes, that the symptoms are, so to speak, allergic manifestations due to toxic substances arising or set free in the course of the destruction of the microbes. In

the light of this view the incubation period would represent the time necessary for the formation of sufficient antibodies to break up the microbic proteins. In many infections this period corresponds closely in length to the period preceding the acme of antibody formation under experimental conditions. This is illustrated especially well in small-pox and vaccinia, and as here the cutaneous lesions contain the virus it is reasonable to regard the lesions as the result of the reactions between the antibodies and the virus. On daily vaccinations of a susceptible person, v. Pirquet found that the maximum reactions occur at the same time about all points of inoculation, namely when it occurs at the first point; here, then, the antibodies educed by the first vaccination on reaching the required concentration act in the same way and with the same result on the virus deposited in the skin from day to day. We have just heard that in serum disease the incubation may be shortened very greatly in persons previously injected with serum, that is sensitized or partially immunized, and so also on revaccination of previously vaccinated persons, accelerated reactions often occur; and varioloid is to be regarded as an atypical form of small-pox in a partially immune person. Undoubtedly the incubation and clinical course of other infections is influenced by heightened reactivity on the part of the body caused by previous attacks.

Jenner probably was the first to recognize what we now speak of as allergic reactions to infectious material. He observed that the skin of persons having had small-pox or cow-pox reacted peculiarly to the application of variolous matter. Thus in a woman who had cow-pox 31 years before she was inoculated with variolous matter, "an efflorescence of palish, red color soon appeared about the parts where the matter was inserted and spread itself rather extensively, but died away in a few days without producing any variolous symptoms." That common wound infection is excluded seems clear because he observed the phenomenon so regularly under these special conditions that he was led to comment as follows: "It is remarkable that variolous matter, when the system is disposed to reject it, should excite inflammation on the part to which it is applied more speedily than when it produces the small-pox. Indeed it becomes almost a criterion by which we can determine whether the infection will be received or not. It seems as if a change, which endures through life, had been produced in the action, or disposition to action, in the vessels of the skin; and it is remarkable too, that whether this change has been effected by the small-pox, or the cow-pox, that the disposition to sudden cuticular inflammation is the same on the application of variolous matter." In this remarkably clear state-

ment we note with special interest the intimation of the diagnostic value of the reaction.

The specific allergic state of the infected body is shown then also by the reactions which take place when the substance causing the infection, the antigenic substance, is introduced into it. The tuberculin test and other tests like it are based on this circumstance. Reaction to tuberculin is developed best perhaps in the tuberculous person or animal, but it is obtainable also after active sensitization by means of tubercle proteins, and passive transfer of the reaction to guinea pigs has been accomplished in such a variety of ways that it unquestionably must be regarded as humoral in nature. Of the different forms of the tuberculin reaction it is not necessary to speak. Since the introduction of vaccine therapy, general reactions with fever and malaise, acute changes in local lesions, and sometimes reactions at the site of the injection of the vaccine have been observed in many subacute and chronic infections; diminution of complement and a fall in opsonin—negative phase—generally accompany this reaction. Within the past few months, Noguchi has shown that in syphilitics, extracts of the *treponema pallidum*, which he has grown in pure culture, give a characteristic cutaneous reaction. Highly interesting observations have been made recently on the allergic reactions in gonococcal infections. We now know that the serum of patients with such infections contains substances that in conjunction with gonococci bind complement. When inoculation of gonococci was begun it was soon observed that acute reactions may develop in the lesions of inoculated patients. Irons (1908) described in detail the reaction as it appears after the injection of gonococci in arthritis. This reaction which in every way is analogous to the general tuberculin reaction is characterized by “a rise in temperature, often only slight, an increase in pain and tenderness in the affected joints, and occasionally some increase in swelling, and a variable degree of malaise. The symptoms follow the injection in from 8 to 12 hours and commonly last 24 hours. Frequently there is a decided tenderness at the site of the injection, greater than after the inoculation of the same dose of the same proportion in normal subjects. Commonly there is marked redness and edema lasting from 24 to 48 hours.” Usually there is a slight leukocytosis during the first twenty-four hours. A similar general reaction with increased pain and swelling of the focal lesions occurs in other forms of gonococcal localizations. Quite recently, Irons has demonstrated that in gonococcal infections a cutaneous reaction is easily obtainable by applying ex-

tracts of gonococci to the skin in the same way as tuberculin is applied in v. Pirquet's test.⁹

It is self evident that as the details of these newer allergic reactions are worked out, useful adjuvants will be added to our means of diagnosis of occult infections.

That many so-called idiosyncrasies with respect to certain foods,—strawberries, cheese, fish, oysters, buckwheat, pork, eggs, cow's milk, etc.—in reality are expressions of allergy can hardly be doubted. Some striking examples of sensitiveness to milk and egg-white ("egg asthma") have been described. It is true that not many cases of alimentary allergy, or anaphylaxis have been studied thoroughly from this newer point of view as to their nature, but in one case of intolerance of pork it was found that the serum of the patient introduced in guinea-pigs produced allergy to pork (passive anaphylaxis).

It has been suggested that under certain conditions the proteins of the body itself may become so changed—"heterologized"—as to acquire antigenic powers and on reacting with the antibodies give rise to toxic substances. It would be particularly at the seat of severe lesions, such as are produced in certain forms of chronic tuberculosis, and in burns, for instance, that this change most likely would occur. Claiming support from experiments, Heyde¹⁰ would account in this way for the fall of temperature, convulsions and delirium that sometimes develop unexpectedly several days after a burn. Certain drug eruptions, e. g. those from iodid and bromid, may rest on a similar basis. Since it has been claimed that placenta, amniotic fluid, and fetal serum act as foreign proteins in adults of the same species, the idea that puerperal eclampsia, "the disease of theories," is an anaphylactic condition has gained much ground.

The skin, as we have seen, presents many interesting phenomena from the allergic point of view: the lesions of serum disease, the eruptions of many infectious diseases, the urticarias and other manifestations of the absorption of foreign proteins from the digestive tract (alimentary anaphylaxis), the allergic reactions of infectious diseases, all indicate that the skin not only has a marked affinity for foreign proteins but that it also is a

⁹ The serum of animals immunized against gonococci has been found to harbor various specific antibodies—agglutinins, precipitins, bactericidal and opsonic elements, and bodies that in connection with gonococci bind complement—and from the study of the action of such serum, on various strains of gonococci it appears that the gonococcus group is made up of races with distinct affinities, so that the extracts or mixtures of gonococci used for diagnostic purposes better be derived from several distinct strains. It is interesting to note also that there is a chemical relationship between the gonococcus and the meningococcus because it does not seem possible to differentiate absolutely one from the other by means of the complement fixation test; this also seems to hold true with respect to the cutaneous reaction.

¹⁰ Med. Klink, 1912. 8, p. 263.

sensitive reagent for the various products of parenteral proteolysis. To what extent other tissues have similar relations cannot be discussed now, but I would mention that hay fever and certain forms of asthma appear to be allergic phenomena, and that certain hemorrhagic lesions of the intestines also may be of this nature.

ALLERGY AND IMMUNITY.

Returning now to the apparent incompatibility between immunity and the allergic state, we observe that in the so-called sensitized body the specific foreign protein may be split up so rapidly by the complement, acting through the specific amboceptor, that toxic substances are set loose in toxic quantities; in the normal body symptoms develop probably because the process proceeds slowly and gradually. Now, infectious microbes are destroyed by the same mechanism of proteolysis, and when small quantities are introduced, as often must be the case in natural infections, the microbes may be disposed of in this way before they multiply sufficiently to supply toxic doses of poison, and the process of destruction will occur with greater promptness in the sensitized, that is more or less immunized, body "when the system is disposed to reject" the foreign protein. This is immunity, natural and acquired, based largely on prompt, early reaction. In reality the allergic state is not one of greater susceptibility as we frequently hear it stated, but one of greater reactive, and consequently in infectious diseases of greater protective power, the actual susceptibility to the same poisons being probably the same in the average allergic and normal body. Hence there is no incompatibility between immunity and allergy; the allergic symptoms are manifestations of antibody-antigen reactions in the living body.

Three Years with the Army of the Potomac—A Personal Military History.

BY WILLIAM WARREN POTTER, M.D., BUFFALO, N. Y., BREVET LIEUTENANT COLONEL, U. S. VOLUNTEERS; SURGEON IN CHARGE OF FIRST DIVISION FIELD HOSPITAL SECOND ARMY CORPS; SURGEON 57TH REGIMENT NEW YORK VOLUNTEERS; ASSISTANT SURGEON 49TH REGIMENT NEW YORK VOLUNTEERS; RECORDER SECOND DIVISION HOSPITAL SIXTH ARMY CORPS, ETC., ETC.

Reams' Station.

Sunday, August 28. At the Burchard House. We returned here yesterday morning, after a week's absence at Reams' Station and in that direction. After seeing Warren firmly established

in his grip on the Weldon R. R., the Second Corps was set to work, tearing up the road. On Thursday, the 25th, after having destroyed about ten miles of the road, we reached Reams' Station, or rather we had already destroyed the track two or three miles farther on, when the enemy attacked us in considerable force. Several different assaults were made, five in all, when we were finally driven out. It pains me to say that the Second Corps, though for the first time in its history, behaved disgracefully, some of the men running like sheep. Hancock and his entire staff strove in vain to rally them, exposing themselves to a terrible fire in so doing; even the Medical Director, Commissary of Subsistence, and the Chief Quartermaster were called upon to perform the ordinary duties of aides, which they all did in a gallant manner. But nothing could be done to retrieve the lost fortunes, and with the coming on of darkness we made preparations to retreat within the Petersburg lines. Captain E. P. Brownson, the Corps mustering officer, was killed, and Lieutenant Colonel Francis A. Walker, Assistant Adjutant General, was captured. These were the only casualties to the Corps Staff. Walker was sent with an order to Miles, commanding the First Division, and unconsciously rode into the the enemy' lines through a gap in our own. Colonel Beaver received a wound in his right thigh that necessitated its amputation through its upper third, which Dr. Wishart and I performed. The Colonel was just returning from absence by reason of his Petersburg wound, having arrived only that day, and was going out on foot to take command of the Fourth Brigade when he was struck by a rifle ball that shattered his thigh. I had him brought hither from the field on a stretcher, by a detail of sixteen men, distance about ten miles, and he is now inside the Burchard Mansion doing well, and has, I think, a fair prospect for recovery.

Our loss in killed and wounded was not large, but many were taken prisoners, and our military prestige is gone, though, let it be hoped, only temporarily. We lost nine guns, including McKnight's 27th N. Y. Battery in which Lieutenant W. S. Bull is serving. This is the second time McKnight has come to grief during the campaign. On June 22 he lost four guns; but, when, at Deep Bottom in July, the First Division took four thirty-pounders back again, it was regarded by the boys as pretty good interest for the brief loan of McKnight's Napoleons. After all we have passed through during the past week, it seems good to get back here to the Burchard house. Last night the firing continued almost the whole night, and I amused myself watching the shells as they sailed through the air, the spectacle resembling a display of fireworks.

Tuesday, August 30. Heavy firing was kept up until a late hour last night, but it amounted to little or nothing in its effects. Colonel Beaver is still doing well, though not out of danger yet; he bears his suffering bravely, however, and keeps up good courage, which is half the battle. I hear that Colonel Brown, missing since May 12, has been exchanged and is at his home in Erie, Pa. Miss Gilson paid me a call this afternoon, but she did not dismount as she was in some haste to return to City Point. The weather is delightful now, not as hot as it has been, and everybody feels more cheerful. General Hancock comes frequently to see Colonel Beaver, and cheers him by saying, nearly every time, "Never mind the leg, Beaver, you'll be a Brigadier General now." I took a ride in the country yesterday, and called at a farm house where they served watermelons and peaches in bountiful quantities, so that my appetite in that direction was appeased for the nonce.

Friday, September 2. We are still at the Burchard house which, taken altogether, is the best location for a hospital I have yet seen within all the Petersburg lines. It is near enough to the line of entrenchments to be within easy reach, and far enough away to be out of immediate danger; it is off the main thoroughfare sufficiently far to escape much of the dust, and the grounds are well adapted to the proper arrangement of the hospital tents, and to ensure good drainage. The tents are pitched in the peach orchard adjoining the kitchen garden, which latter is well fenced—the only fence anywhere in sight. The family is entirely dependent upon the commissariat of the hospital for daily subsistence, and in return, Mrs. Burchard gives me such unrestricted use of the house as I may demand. Thus far I have only asked for quarters for Colonel Beaver inside the house, who is occupying the back parlor, looking out upon the garden over a veranda.

I have built a fine brick bake-oven near one of the out buildings, that supplies us with fresh bread, pies and other luxuries. Colonel Beaver seems to be doing well, although I regard his case as still dangerous. Mr. McCallister, his law partner from Bellfonte, Pa., arrived late last night, and will remain with the Colonel for a day or two. Miss Gilson is here taking care of him, and he seems more cheerful under her considerate and tender ministrations. The weather is now delightful, and the nights cool enough for one to sleep well. We hear that McClellan has been nominated for President by the Democrats at Chicago. It is to be regretted that so good a soldier should be so poor a politician—and that on the wrong side. Dr. Norris has returned from his twenty days leave, having visited Niagara Falls during his absence.

Monday, September 5. I have suffered from neuralgia in my face for a day or two, probably due to an imperfect tooth, which is the first illness I have had for more than a year. Dr. Wishart has extracted the offending tooth, and I have finally obtained relief. Today has been warmer than any day since September came in, the weather of late having been quite fall-like in character. Colonel Beaver seems better today, and I have strong hopes of his recovery. Miss Gilson is still here rendering great service to the Colonel, frequently entertaining him, and the rest of us, I might say as well, with music, both vocal and instrumental, as she sings and plays beautifully. She is a niece of the Hon. Mr. Fay, of Chelsea, Mass., who is a prominent member of the U. S. Sanitary Commission. Mr. Fay, himself, pays frequent visits to the hospital, and has made many friends among the patients, as well as the staff, who all like him very much indeed. He comes up from City Point almost every day while his niece is with us, and takes the tenderest care of her in every way. Colonel Beaver gave me his photograph today, which I sent home at once, and it is now in my military album.

Last night, at midnight, General Grant ordered every gun bearing on the enemy's line, to fire a shotted national salute (34 guns) in celebration of Sherman's capture of Atlanta. It was a magnificent spectacle, and had not continued long ere the enemy replied with considerable vigor, the fusillade lasting about two hours. A fifteen inch mortar near the Appomattox on Butler's front, called "The Swamp Angel," was particularly noticeable for its share of the work. It can be loaded and fired but four times an hour, owing to the fact that it requires nearly fifteen minutes to clean it after each discharge. The fuse, as it goes upwards into the heavens looks like a star, particularly while it poises for a moment, before descending into the enemy's lines. The air seemed full of shells for a time, and it was a grand pyrotechnic display. Some of the shells burst in the vicinity of the hospital, but did no harm.

A cattle raid has been made in the vicinity of the hospital on the Army herd, the whole of which, 2,500 head, was captured and driven off by the enemy, not more than 100 stragglers having been found in the woods afterwards. I am told that the scheme was planned and executed by General Dearing, who knew every bridle path in this region where he courted his wife, having, no doubt, rambled over the country many times with her during the happy courtship. The cattle were herded about a mile in rear of the hospital, and when I heard the firing so distinctly as I did, and early in the morning, too, I at first thought it something more serious; as it was, however, it simply turned out a clever

piece of theft, which every one must concede. It temporarily embarrassed the Army for beef, but this was overcome in a few days; while to the enemy it was of inestimable value just at this time, when the Rebel Commissariat is at low tide.

Saturday, September 10. Burchard House. We have moved twice during the week, once away from here, and once back again. Col. Morgan, Chief of Staff, (Second Corps) told Dr. Dougherty that the enemy was expected in our rear on the Prince George Road, and the doctor gave us an order on Tuesday, about five o'clock P. M., to move immediately. We obeyed the order promptly, although it was in the midst of a driving rain, going out towards the front, where we had our hospital about 200 yards in rear of the line of battle of the 2d Division for forty-eight hours. The scare passed over at the end of that time, and we are now back again as good as before.

I have been to City Point today where I ordered a bill of goods, through the Medical Purveyor, from Baltimore for the hospital, amounting to \$1,200.00. This will give the patients canned fruits, oranges, lemons and many other luxuries not furnished by the Commissary Department, which will be paid for out of the hospital fund. This fund accrues from the savings in the rations on the march and in an active campaign, when we cannot use all we are entitled to; such as are not drawn each day are passed to the hospital as a cash credit, and against this fund we can draw for the purchase of whatever we need that is not furnished in the supply tables of the several Departments, Medical, Commissary, or Quartermaster.

I am beginning to make preparations to leave the service, though I shall not probably be mustered out until the 23d. Lieutenant Snyder, Q. M. 57th, will go at the same time. Dr. Dougherty is very anxious for me to say that I will come back after a month spent at home, and take charge of the hospital again, referring to the subject in some way almost every time I see him. Colonel Beaver is improving day by day, and I now have strong hopes of his recovery. Indeed, there is little doubt on the subject. Miss Gilson has returned to City Point, and we were all sorry to lose her excellent services, as well as part with her cheerful company. I saw Lieutenant Bull yesterday, who informs me that he expects to go to Buffalo on recruiting service in a few days; so we shall probably meet there before long.

Wednesday, September 14. I have just been informed that I can be mustered out tomorrow if I desire, that being the termination of three years' service in my case, the date of my commission being September 15, 1861. In case I accept discharge

tomorrow I shall start for home next Monday, the 19th. It will take some time to settle my accounts with the Government, and to transport my horses, so I shall be kept in Washington for a few days, and shall not reach home probably until the 25th, or thereabouts. The weather has been cooler again for a few days past, so much so that overcoats have been comfortable morning and evening. Miss Gilson paid me a visit yesterday, remaining to dinner. Colonel Beaver is continuing to improve and I am confident he will recover.

The rebels began a furious cannonade on our front about two hours ago, that has not yet ceased though it seems to be dying down somewhat. Some of the shells burst over Army Headquarters, which are located a short distance to our front. Last evening Dr. McParlin, Medical Director of the Army, and Colonel Wilson, Chief Commissary A. of P., came over on foot and inspected the hospital, after which Colonel Wilson gave us some fine music on the piano in Mrs Burchard's parlor.

Mustered Out.

Thursday, September 15, 1864. Today being the completion of three years' service with the Army of the Potomac, and the end of the term for which I originally entered service, I have been duly discharged from the military service of the United States. I have transferred the hospital to Dr. James E. Pomfret, Surgeon 7th N. Y. H'y Art, who receipts to me for all the property, and for which invoices are now being made out.

Dr. Pomfret remained in charge until the following February, when he was succeeded by Dr. Charles S. Hoyt, Surgeon 39th N. Y., Executive Officer of the Hospital. Dr. Hoyt held the position until the end of the war, and is at present Secretary of the State Board of Charities.

In concluding this narrative it may be interesting to note: that no corps of the Army had a greater aggregate of casualties than the Second, and that from May 3d, the date of the opening of the campaign, to September 19th, the day of my departure, the register showed that we had treated 8,000 patients in the First Division Hospital, of which number over 6,000 had been wounded.

The Pulse and Its Observation by Nurses*

By LOUIS FAUGERES BISHOP, A.M., M.D.

Clinical Professor of Heart and Circulatory Diseases, Fordham University School of Medicine, New York City; Physician to the Lincoln Hospital.

The pulse occupies a good deal of the attention of physicians and nurses but it does not always occupy as much of the real thought as it ought.

* Lecture delivered to Nurses of Lincoln Hospital, Feb. 28, 1912.

The pulse is the general name given to the wave motion that is imparted to the blood current by some movement on the part of the heart. If you throw a stone into a lake, a wave which you can see with your eye is started that spreads in every direction on the surface of the water; or if in the dark you had your hand in the water you could feel the wave as it passed. That is like the pulse—a wave motion. It is not caused by the passage of blood, just as the wave of the lake is not caused by the passage of water. It is the passage of an impulse from one part of a body of blood to another part. In other words, it is a form of motion and not a material thing.

That is well illustrated by taking the end of a piece of string attached to something at the other end, and when you shake the string the wave which the motion generates at one end of the string passes to the other, but the string itself does not move from place to place. It is in just the same place as before the wave passed along it.

The pulse is a wave motion in the blood, and has nothing to do with the flow of the blood itself, so the pulse is not the measure of the amount of blood that is flowing. It is the measure of the amount of wave motion that is imparted to the blood by the contractions of the heart.

Another proof of that is that you can compress the artery completely in the wrist so that the blood cannot flow through it, and yet you can feel the pulse just above where it is compressed, although of course, there is no blood flowing through the vessel.

Up to quite recent times, when we spoke of the pulse it was understood that we referred to the pulse that is felt at the wrist—in the radial artery, and we considered that as the principal pulse in the body, though, it might be felt at the radial artery, the temple, or at one of the arteries of the leg. In other words, the arterial pulse was the only pulse we considered.

Of late years, those who have paid most attention to heart trouble have come to regard the pulse in the veins of great importance. It is indeed of great value and has reference to the contractions of the auricle. You know the heart is divided into four chambers, two auricles and four ventricles.

The four chambers of the heart come pretty closely together so that in a picture it is not easy to separate them visibly.

The blood enters the auricle, which is separated from the ventricle by valves, and then it enters the ventricle and is pumped into the arteries (we are speaking of the left side of the heart.) The contraction of the ventricle causes the pulse in the arteries. The contraction of the right auricle in health causes a pulsation in

the veins called the jugular pulse because it is generally observed in the jugular vein.

The jugular pulse is of a good deal of importance to nurses provided they have been taught to observe it. You know from your experience that in very sick heart patients and in some other very sick patients you see a very marked pulsation in the neck. That is often the jugular pulse, and it has a particular significance. It means ordinarily that the auricle is not working properly, and that is a serious matter to the heart.

I have been at great pains to explain to you the nature of the pulse—that it was a wave motion and not the motion of the blood itself. The blood, of course, is flowing toward the heart through the veins, and yet the venous pulse travels from the hearts up to the veins. It might puzzle you very much if you thought about it. There is great beating in the veins but the blood is flowing in a different direction. The wave from the stone travels up-stream against the current if you throw a stone into the water. In the same way the venous pulse travels upward from the auricle into the veins.

I have recently had printed some nurses' charts for my private practice, and I put at the top of the chart that the nurse should observe any pulsation at the neck because in very sick people the onset of pulsations in the neck means weakness of the auricle and the auricle is the part of the heart which has to do with the origin of the contractions and its regularity. It is like the sparking part of an automobile; if this gets out of order the engine sputters and does all kinds of things; and it is the same way with the heart when the auricle misbehaves.

The most irregular hearts we have to deal with in very sick people are hearts in which the auricle is paralyzed, that is, there is a trembling palsy of the auricle, and these are the cases in which there is this marked pulsation in the neck.

In health the blood flows into the auricle, then the auricle gives a little contraction and drives the blood into the ventricle; then the ventricle contracts and drives it onward. Also, in health the jugular pulse comes a little before the radial pulse so that you find the pulse in the veins a little before the pulse at the wrist because the auricle contracts and drives the blood into the ventricle and the ventricle contracts and drives it into the circulation.

This is the natural way, but this little healthy contraction of the auricle does not make a pulse that is big enough to be noticed. If you look very, very closely in a good light at a patient sometimes you can see the natural wave or auricular contraction in the jugular vein, but ordinarily it is too slight to be

noticed; we can only get it by careful measurements with apparatus. So that the natural jugular pulse is not observable by ordinary means.

In bad cases of heart disease, the auricle becomes paralyzed and dilated, and is poisoned and does not work at all, and in these cases the contraction of the heart sends a wave back into the veins which is the visible pulsation in the veins that we are so familiar with in very sick heart patients. Now that wave, of course, really has its origin in the ventricle. In other words, it sends a wave back through the paralyzed auricle into the veins, and in that case our tracing from the veins would be very much like our tracing from the wrist. In other words, we get what is known as the ventricular form of venous pulse. This may seem a little complicated, but it is the latest advance in the understanding of heart disease. It involves more than half of the very bad heart cases that we see. It is a thing that can be easily suspected by a very simple symptom—by this pulsation in the neck. It is one of the great discoveries of modern times, so I do not hesitate to tell you about it.

When you put your hand on the pulse of a very sick patient and can see a pulse in the veins, which corresponds to the pulse at the wrist, particularly when the heart is irregular and rapid, you have every reason to suspect that there is paralysis of the auricle.

There is a very nice thing about this form of heart disease: that it yields to digitalis in a very specific manner. Digitalis often comes about as near bringing about the resurrection of a patient practically dead as any drug that I know. It restores the circulation, removes the dropsy, and gives the patient back a heart that is useful and able to carry on the circulation.

So I want you to remember that the pulse is a wave motion. It is not a material thing but a form of motion that is transmitted along the blood current, and has nothing to do with the movement of the blood as a whole.

I want you to remember that the pulse in the arteries is a wave motion and that it has its origin in the contractions of the ventricle or pumping part of the heart.

I want you to know about the fact of the existence of a pulse in the veins, and that it naturally occurs a little before the pulse at the wrist. Then I want you to remember that particular form of venous pulse that is easily visible and which corresponds in time with the pulsation at the wrist because it has its origin, not in the auricle, but in the ventricle.

The Chinese are said to be a people whose practice of medicine is founded almost entirely upon the pulse. The patient in China sometimes goes to the physician and thrusts his hand

through a curtain and the physician feels his pulse, makes a diagnosis and prescribes. In the Chinese books of medicine there are hundreds of different kinds of pulses described. It is very foolish to say that any great nation is entirely wrong in anything that is a large part of one of their arts. However, we cannot help believing that the Chinese are a little one-sided in paying so much attention to the pulse, but they have undoubtedly been able through thousands of years of observation to put into writing a whole lot about the pulse which we never have put into writing, for the pulse in a great measure is to be estimated as a matter of judgment.

You feel the patient's pulse, and you say, "His pulse is better today than it was yesterday." Now what do you mean? You mean that you think it represents a better condition of affairs, but you may be very much in the wrong. A weak pulse is not exactly a bad pulse; a strong pulse is not necessarily a good one. Everything depends upon the circumstances. It is better to be guided by certain rules that we can formulate than it is to be guided by our impressions.

I don't want to try to imitate the Chinese and describe five hundred different kinds of pulses for I probably could not do it, but I want you as nurses to remember some fundamental things which are self-evident but which are often forgotten.

In the first place do not be misled by an apparent weakness of the pulse or encouraged by an apparently strong pulse. A weak pulse in a person generally feeble who is lying low, without any demands on the circulation, may be a conservative pulse for that person because it does not use up any energy and gives the patient a chance to recover. So a weak pulse that is not rapid in a feeble person is not alarming and not to be treated as such. The thing to be considered when the pulse is weak is, not whether the pulse can be made stronger because the pulse is only a wave motion transmitted from the heart. The thing to be considered is whether the blood is circulating properly; that is determined by the effect on the essential organs of the body. When I am teaching students, I repeat over and over again the signs of circulatory failure. These are shortness of breath on account of the deficiency of the blood supply to the lungs, swelling and tenderness of the liver because the blood is not pumped out of the liver, and dropsy.

Therefore, if the patient can lie down in bed and breathes quietly, is not tender over the liver, and there is no dropsy, ninety-nine times out of a hundred that patient is not in any danger from circulatory failure, and there is nothing to worry

about because the heart is not sending big waves along the blood vessels to make a pulse.

On the other hand, a patient may have a pulse which is very hard and bounding which seems to be very strong—easy to feel and see and count—but that patient may be short of breath, have congestion of the liver and dropsy, and is in danger of circulatory failure and needs to be attended to.

Nurses often make the mistake of applying stimulation to weak patients to make the pulse stronger to feel, and it is a very foolish thing. It is not done so much in medical work as in surgical work. The foolish stimulation of the patient does him harm, and really wears out the heart and disturbs the circulation, making the chances of getting a real circulatory failure greater.

So remember that as long as the patient breathes well, has no congestion, and the blood is circulating properly, you need not worry about the character of the pulse.

There is one sign of circulatory failure that is of more importance than any other, and which the nurses should always watch, and that is, an increase in the rapidity of the pulse. If you will examine the charts of any one of fifty patients who have died with exhausting diseases or acute diseases, you will find that the failure of the heart was often characterized by an increase in rapidity. So that if the pulse averages 80 one day, 82 the next, 84 the next, 90-100-110-115-120--130-140-160—if the heart is becoming progressively rapid, that is always a very serious matter and should receive the utmost attention.

In considering this increase in rapidity, you have always to discount the presence of fever, because the two things that make the heart rapid usually are fever or weakness of the heart, so that if there is no increase in fever and the heart becomes gradually rapid, it is a serious sign.

Then it is particularly important in these cases, where we are paying so much attention to irregularities, to note any irregularity of the pulse, and describe it as best you can. Ordinarily irregularities are of two kinds: The lost beat and the extra beat. You will get a good deal of interest in examining your patients and making up your mind which is which.

“Lost beat” means that one of the beats got lost somewhere between the auricle and ventricle very often, or else that it did not originate at all. Now that is not the ordinary form of irregularity.

The ordinary form is the extra beat.

We have a beat, and then a little beat, then a long pause, and then a very big beat, and then a regular pulse for a while.

This is the ordinary form of irregularity which exists in

a large number of people. I daresay if we could feel the pulses of all of you nurses we would find at least one person who once in a while had an irregularity of that kind. It is very common; it is not a lost beat at all; it is a little beat that comes too soon. It uses up the energy of the heart so that there is an extra long pause, then an extra big beat, and then the heart goes on regularly. This is called an extra systole. If you feel very lightly you can feel the little beat sometimes. You feel many regular beats, then a little beat, and then a long pause; that is extra systole. There is apparently a beat lost because the beat is so small that it is often overlooked.

These are the two ordinary forms of irregularity. The form of which I have just spoken is of no particular importance. People have it who live to be a hundred years old and it does not affect them.

The lost beat is generally of some importance. We find it in people whose hearts are giving out. If you notice the heart of such a patient, you notice that you get lost beats. The heart fails to contract and the beats are dropped out. Of course, that is very often a serious matter. This may mean a heart that has lost its excitability and cannot respond. So the lost beat is important, though when you feel the pulses they may feel just alike.

In feeling a pulse you must not be misled by the difference in pulses which can be accounted for by the difference in the character of the vessel itself. In young people the vessel is very soft, and in old people you know the vessel is very hard. In young people the blood pressure is low, and in older people it is high. As you have often seen, and as I have just said, an old person may show signs of failure of the circulation, and yet have a strong pulse; a young person may have no signs of failure of the circulation with a weak pulse, so you have to discount this fact.

Always remember the importance of the circulation. If the patient's circulation is carried on badly, he always has shortness of breath, dropsy or congestion of the blood somewhere. Try to remember the distinction between the pulse and the circulation.

The different kinds of pulses are not worth detailed discussion. You have all felt the pulse of aortic regurgitation where the pulse is like pieces of shot rolling under your finger, the pulse going up and down very quickly.

You know the character of the pulse where there is mitral stenosis, where the quantity of blood that is circulating is very much diminished because of obstruction in the heart. You know the compressible pulse of fever patients, and in pneumonia you know how deceptive the pulse is because the pulse at the wrist

may be very good, and yet the pulmonary circulation may be very near to failure.

The lesson I would like you to carry with you is not to draw too definite a conclusion from your own opinion as to the quality of the pulse—whether it is good or bad. Try to record and remember definite things, particularly the increasing rapidity not accounted for by fever. Watch for signs of circulatory failure and never neglect them; any patient short of breath is worthy a great deal of attention.

The counting of the pulse is a thing worth a good deal of attention, and is a matter that will often surprise you. I am surprised sometimes to this day by a “quick slow pulse” or a “slow quick pulse.” Some pulses give the impression of a much greater rapidity than they have, and other pulses on account of the character seem to be rapid when we actually count that they are slow. So the only criterion is the actual count.

Another point is that if the pulse at the wrist is not actually felt, as often occurs because the radial happens to be deep, it is just as readily taken at the temple or in any accessible artery, because the blood wave passes through the body in a small fraction of a second and you can count the pulse where you please.

It is a good plan to be careful because I have noticed in a great many cases the pulse is recorded wrong for the reason that the nurse has only recorded the pulse as she felt it at the wrist. Now in irregular pulses what we want is the actual number of beats. We do not want only the big beats. We want all the beats as nearly as possible. I would so much rather see the report, “The pulse is not easily counted,” or, “The pulse cannot be counted,” or, “The number of appreciable beats is so and so,” than a record of the big beats only. It is better in describing anything to describe it in full as you see it and not use too much condensation. It is always better to waste a few words in describing anything than it is to try to squeeze unusual facts into a conventional description of things.

54 West 55th Street, New York City, N. Y.

SOCIETY PROCEEDINGS.

THE MEDICAL SOCIETY OF THE COUNTY OF WYOMING met at Warsaw, Oct. 8. Officers were elected as follows: Dr. George H. Peddle, Perry, President; Dr. W. J. French, Pike. V. P.; Dr. L. Humphrey, Silver Springs, Sec.-Treas.

THE GROSS MEDICAL CLUB met at the Park Club, Buffalo, Sept. 27, being entertained by Dr. A. E. Diehl of Buffalo. Dr.

F. A. Helwig of Akron, Health Officer of the town of Newstead, read a paper on Infantile Paralysis. The next meeting will be entertained by Dr. James E. King of Buffalo, late in October.

THE ELMIRA ACADEMY OF MEDICINE meets in the Federation Building, at 8:15 P. M., on the first Tuesday of each month. At the October meeting, Dr. Ross C. Loop read a paper on the *Bacillus Coli*. At the November meeting, to be held Wednesday, Nov. 6, on account of election, Prof. V. A. Moore of Ithaca will read on Tetanus and Dr. Henry Flood will present some Reminiscences.

THE ROCHESTER ACADEMY OF MEDICINE usually meets on Wednesday evenings at 8:30. On Oct. 16, Section II. (Surgery and Surgical Specialities) met at the Rochester Club, holding a dinner in honor of the guest, Dr. George W. Crile of Cleveland, who later discussed the Thyroid Question.

THE BUFFALO ACADEMY OF MEDICINE meets on Tuesday evenings in the Public Library Building, at 8:30, there being usually a rotation of the sections, Surgery, Medicine, Obstetrics and Gynaecology, Pathology. With the exception of election night, there will be a meeting every Tuesday from Oct. 1 to May 20. Stated meetings of the entire Academy (which do not differ in general interest nor attendance from the section meetings, but at which the President of the Academy presides, if present, instead of the Section Chairman, business matters are considered, and a collation is served, will be held Oct. 15, Nov. 12, Jan. 7, and March 25. The annual meeting for the election of officers, annual report, etc., will be held June 10.

These general announcements are made as the Academies welcome guests, who should make themselves known to some member, be presented to the meeting and receive the privilege of the floor. We also suggest that physicians able to attend Academy meetings often, apply for non-resident membership.

On Oct. 1, at the BUFFALO ACADEMY OF MEDICINE, Dr. Hideyo Noguchi of New York City, described the Life Cycle of the *Treponema palidum* and discussed spiral organisms generally. He has promised to publish the gist of his remarks in this JOURNAL, later. Dr. Roswell Park read a paper on Isopathy in the Twentieth Century, based on Trade lists of organs, materies morbi, &c., still published and apparently indicating an actual persistence in their use.

On Oct. 8, Dr. Louis J. Hirschman of Detroit showed lantern slides illustrating the diagnosis of chronic colitis and its attendant dilatations, strictures and ptoses and discussed the effects of typh-

lostomy, resection and various other surgical procedures.

On Oct. 15 (Stated Meeting) there was a symposium on Accouchement Force: Vaginal Hysterectomy, Dr. W. H. Mansperger; Hebosteotomy, Dr. F. C. Goldsborough; Version and High Forceps, Dr. P. W. Peyma.

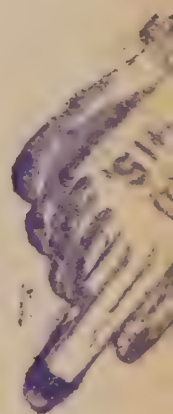
(Note: JOURNAL matter goes to printer about the 20th of each month and, as we dislike to make statements in pluperfect conditional, meetings and other events occurring after that date are left for the subsequent issue.)

THE MEDICAL SOCIETY OF THE COUNTY OF MONROE held its regular October meeting Oct. 22, at the rooms of the Rochester Academy of Medicine. Program: "Specialism: Medical-Legal and Expert Testimony." Dr. C. W. Hennington; "Hemorrhage in the New-Born; its Treatment and Report of Case," Dr. Norris G. Orchard; "Remarks on Physicians' Liability Insurance," Dr. James B. Woodruff. Dr. S. W. Little, President; Dr. Albert C. Snell, Secretary.

THE HOSPITAL MEDICAL SOCIETY OF ROCHESTER meets semi-monthly, October to May. The honorary members number 40, the active about 30. On Oct. 10 Dr. George M. Gelser read a paper on the Treatment of Puerperal Infections; on Oct. 25, Dr. Bradford A. Richardson on Deafmutism. The officers are as follows: President, Myron B. Palmer; Vice-President, William H. Sutherland; Secretary and Treasurer, George H. Gage; Trustees, Richard M. Moore, Albert C. Snell, Norris G. Orchard, Frank P. Leadley, Ralph R. Fitch; Committee on Entertainment, Chairman, The Secretary; Willis E. Bowen, Bradford A. Richards.

THE CLINICAL CONGRESS OF SURGEONS OF NORTH AMERICA will meet in New York, Nov. 11-16, the Waldorf-Astoria being designated as Headquarters. Clinics will be held daily, from 8 to 5 and evening meetings will be held at which eminent surgeons of America and Europe will discuss "live surgical subjects." A general invitation to attend is issued to the profession. Visitors should register promptly at headquarters, pay the registration fee of \$5.00 and receive detailed programs. The officers are as follows: Albert J. Ochsner, President; Edward Martin, President-Elect; John G. Clark, Vice-President; George E. Brewer, Vice-President-Elect; Franklin H. Martin, General Secretary; Allen B. Kanavel, Treasurer; A. D. Ballou, General Manager.

On the evening of October 2, 1912, there assembled at the International Hotel, Niagara Falls, as distinguished a body of Ger-



man Scientists as it has been the honor of Americans to entertain. These gentlemen, numbering about 300, comprise most of the delegates to the International Congress of Demography, which has had its session at Washington, D. C.

Among their number were the members of the German Central Committee. This committee or association merits a description. It has for its object medical travel-study. Originated by a French physician, Dr. Carron de la Carriere, in Paris in 1899, the movement was readily and rapidly taken up by the German medical fraternity and now numbers about 700 members. Every year a trip is taken, the itinerary of which is so arranged that medical conventions may be included, the expenses curtailed as much as possible, and provisions made for entertainment and sight-seeing.

In Europe, it will be remembered, a craftsman, after having served his apprenticeship, is not considered to have his education completely rounded out until he has done a certain amount of traveling. Often such an *ausgelerter* will travel afoot from place to place for months, working here and there, that he may get the benefit of travel and diverse methods. As a matter of fact Europeans are much fonder of travel than are we and hold it in higher esteem as a means of education. They are thus much better acquainted by actual experience with their country, its resources, inhabitants, etc., than are we with ours. No one extracts so much culture and learning from travel as does the educated man. It is to be regretted that its indulgence is expensive and thereby denied to many younger members of our profession.

These ideas have been imbued, to a certain extent, in the object of the Central Committee. Their work has now been broadened to include study of social, economic, philanthropic, hygienic, and civil institutions; factories, laboratories, mining plants, etc. This work being a post graduate course of a character highly useful to medical men, it would seem that such a work might well be taken up by our county societies.

The arrangements for the day's sight seeing and evening's entertainment of the guests on October 2d, were in the hands of Dr. Carl G. Leo-Wolf of Niagara Falls, to whom a great deal of credit is due. He was assisted in welcoming the guests by the following medical men: Drs. Roswell Park, Lucien Howe, Henry Buswell, Edmond Blaauw, Max Breuer, William Gaertner, Julius Richter, A. W. Hengerer, James Putnam, Rolland Meisenbach, Herman Hayd, Peter VanPeyma, John Ragone, and Fridolin Thoma, all of Buffalo; Drs. J. S. Gianfranceschi, W. H. Hodges, W. D. Hough, A. J. Lawler, N. W. Price, W. A. Scott, Geo. D. Stillson, E. L. Burhyt, T. J. McBlain, W. L. Wilson, of Niagara Falls; Dr. C. N. Palmer, of Lockport, and Drs. W. E. Olmstead and F. W. Wilson, of Niagara Falls, Ontario.

The entertainment was in the form of a *kommers*, or student's convivial gathering, with Professor His of Berlin as toast master. After welcoming speeches by Dr. Gaertner, Dr. Howe and Dr. Blaauw, toasts were responded to by representatives of the various German Universities. A delegation of about thirty members from the Buffalo Orpheus delighted the visitors with German songs.

Among the more noted foreign gentlemen were Prof. Loeffler, of the University of Greifswald; Prof. Weber, of the Imperial Health Bureau; Prof. Vossins, of the University of Giessen; Prof. Simon de Unterberger, privy councilor and honorary physician to his majesty's court of St. Petersburg, and Prof. His, professor of physiology at the University of Berlin.

225 of these German physicians sailed for home on the Victoria Louise, from New York, Oct. 10.

The Rochester Pathological Society held two meetings during October. At the first Dr. C. W. Hennington gave a paper on "Early Medical Annals of Rochester." The second meeting consisted of a symposium on "Proprietary Medicines," by Drs. C. R. Barber, J. M. Swan, and M. B. Palmer.

The Rochester Academy of Medicine held a meeting on October 16, 1912, at which Dr. George W. Crile of Cleveland spoke of "The Thyroid Question." A short time ago Lieut. Frost of the U. S. P. H. & M. H. Service spoke on "Infantile Paralysis."

The Buffalo Medical and Surgical League had its regular monthly meeting on Thursday, October 10th, at the Markeen Hotel. The paper of the evening, entitled: "A Simplified Technique in House Operations," was read by Dr. Julius Richter. Several interesting cases were reported by members. An enjoyable lunch was served.

The 21st annual meeting of the ASSOCIATION OF ERIE RAILROAD SURGEONS was held at the New Sherman Hotel, Chicago, Oct. 8-11. About 90 Erie surgeons are members of this association, beside about 25 who do not belong to it. In addition to an interesting program of papers, clinics were held at various Chicago hospitals.

Officers of the Association, 1911-1912: President, H. F. Gillette, M. D., Cuba, N. Y.; Vice-President, S. Heilman, M. D., Sharon, Pa.; Secretary-Treasurer, B. R. Wakeman, M. D., Hornell, N. Y.; Executive Committee, H. P. Jack, M. D., Hornell,

N. Y.; W. J. Lowery, M. D., Carbondale, Pa.; T. C. Park, M. D. Akron, Ohio.

The 95th semi-annual meeting of the MEDICAL SOCIETY OF THE COUNTY OF STEUBEN was held at Hornell, Oct. 8.

THE CHAUTAUQUA COUNTY MEDICAL ASSOCIATION met at Westfield, Oct. 16. Dr. William S. Bainbridge of New York spoke on cancer. Dr. G. L. Hunter of Westfield and Dr. Fred Rice of Ripley also presented papers. The officers are: Dr. H. A. Eastman of Jamestown, President; Dr. N. G. Richmond of Fredonia, Vice-President; Dr. George F. Smith of Falconer, Second Vice-President, and Dr. W. J. Morris of Jamestown, Secretary and Treasurer. The Censors are Dr. E. M. Schofield of Jamestown, Dr. V. M. Griswold of Fredonia, and Dr. A. A. Becker, of Jamestown.

The Medico-Legal Society held its opening Fall Meeting at the Waldorf-Astoria on Wednesday, October 23rd, 1912, for the discussion of "Medical Expert Testimony in Homicidal Cases Where Insanity is Pleaded," and the merits of the Bill proposed by ex-Chief Justice Emery known as the Maine Bill.

1. Paper by Clark Bell, entitled "Medical Expert Testimony," and the merits of the Maine Bill.

2. Replies by ex- and Chief Justices Hon. Simeon E. Baldwin, of Connecticut; Hon. Orrin N. Carter, of Illinois; Hon. Charles M. Start, of Minnesota; Hon. Charles E. Frick, of Utah; Hon. William T. Spear, of Ohio; Hon. John R. Rowell, of Vermont; Hon. Eugene B. Gary, of South Carolina, and other Chief Justices of the Supreme Courts.

3. Views of Dr. R. L. Parsons of New York; Clarence A. Lightner, Esq., of Detroit, Michigan; Charles E. George, Esq., of San Francisco; Dr. E. E. S. McKee, of Cincinnati, Ohio, and other prominent alienists and medico-legal jurists.

4. The American Institute of Criminal Law and Criminology; the National State and City Bar Associations; the State Medical Societies, and all cognate associations are invited to send delegates to the discussion, and their members to contribute to the discussion, and the literature will be sent upon application.

5. Historical Sketch of the Supreme Court of Oregon, by Judge J. C. Moreland, of Salem, Oregon; The Supreme Court of West Virginia, by William B. Matthews, of Charleston, West Virginia.

6. The Chief Justices of the Supreme Courts of the States, by the Editor.

T. D. Crothers, President; Clark Bell, Secretary.

THE MEDICAL SOCIETY OF THE COUNTY OF ERIE held its regular meeting at the Buffalo Library Building on October 21st, 1912.

Two sessions were held—the first at 4.15 p. m. and the second at 8.30 p. m., the former being devoted to business and the latter to a scientific program. President Dr. Thomas H. McKee presided at both.

Secretary Gram read the minutes of the last meeting which was held June 17th, 1912, also the minutes of the Council meetings of October 7th and October 21st, 1912, all of which were duly approved.

On account of removal from the city, Drs. F. Frisch and R. A. Edson tendered their resignations which were accepted.

Dr. Charles A. Wall, Chairman of the Committee on Membership, presented applications for membership and applicants were elected as follows:

Harold J. McDonald, George J. Saylin, James E. Short, William F. Gallivan, Wellington M. Ross, Leon H. Prior, Timothy F. Donovan, Rose Rudolph Donk, Roy S. Moore, James C. Sullivan, Charles Leone and Jay Thornton Barnsdall.

Dr. Hopkins, Chairman of the Committee on Public Health, presented a report for his committee and submitted a draft of a letter addressed to the District Attorney in reference to school ventilation which, on motion of Dr. Wall, was approved and the committee directed to refer the matter to the District Attorney.

Dr. Bonnar, Chairman of the Board of Censors, submitted a lengthy report, on behalf of the Board, in which he stated that Matthew Stark, a barber of Lackawanna, N. Y., had been fined \$25 for cupping; another man named Reeves was fined \$50 for illegally practicing medicine in the office of Dr. Hughson, No. 6 South Division Street; \$50 also had been recovered in the Treskow case, the fine having been imposed as far back as 1910; the board was also instrumental in bringing about several other indictments for criminal mal-practice. Dr. Bonnar stated that attorney Charles A. Doane, who, for several years, had acted as counsel for the society, had tendered his resignation and that attorney Alfred L. Harrison had been appointed in his stead. Report was adopted and the thanks of the society extended to the Board of Censors.

Dr. William H. Thornton, Chairman of the special committee on collection of accounts, reported progress and asked for further time which, on motion, was granted.

On motion of Dr. Lytle, the details for the conduct of the annual election was referred to the Council with power.

Dr. Woodruff brought up the question of pure water for the city, and after some discussion in which several members participated, it was moved by Dr. Thornton that Dr. Henry R.

Hopkins, Chairman of the Committee on Public Health, be elected to attend the joint meeting of the Great Lakes International Pure Water Association and the National Association for Preventing the Pollution of Rivers and Waterways to be held in Cleveland, Ohio, October 23rd and 24th, 1912, at the expense of the Society: Motion was carried.

President McKee then called for nominations for the various offices to be filled by election at the annual meeting to be held in December, and nominations were entertained as follows:

For President, Dr. J. F. Whitwell; for Vice President, Dr. John V. Woodruff; Second Vice President, Drs. Arthur W. Hurd and Franklin W. Barrows; Secretary, Dr. Franklin C. Gram; Treasurer, Dr. Albert T. Lytle. Members of the Board of Censors, Drs. Bonnar, Fronczak, Bennett, Irving W. Potter, Hendee and A. D. Carpenter. Chairman, Committee on Legislation, Dr. F. Park Lewis; chairman, Committee on Public Health, Dr. Henry R. Hopkins; chairman, Committee on Membership, Drs. George J. Eckel and Harry Mead. Delegates to the State Society, of which five are to be elected—Drs. William H. Thornton, Arthur C. Schaefer, Charles A. Wall, S. A. Dunham, Thomas H. McKee, E. L. Frost, J. V. Woodruff, B. Cohen, George F. Cott and Cyrus S. Siegfried.

At the evening session, Dr. Hartwig read a memorial on the death of Dr. Ludwig Schroeter. On motion of Dr. Crego, the president was empowered to appoint fifty delegates to represent the society at the meeting of the Central New York Medical Association to be held in Batavia, N. Y., October 24th, 1912.

Dr. D. C. McKenney read a carefully prepared paper on "Some Considerations in the Treatment of Constipation."

Dr. James E. King presented an interesting paper on "Gynecology of Accident and Injury."

Dr. Roswell Park read a carefully prepared and very interesting paper, illustrated with lantern slides, on "The Pituitary Body."

Each of the papers elicited interesting discussion at the close of which a fine collation was served.

FRANKLIN C. GRAM, M. D.,
Secretary.

THE MEDICAL ASSOCIATION OF CENTRAL NEW YORK held its annual meeting at Batavia, Oct. 24. An interesting program was provided. Luncheon was served to about 75 who attended the meeting. Several members remained to supper at the Holland Club, as guests of the President, Dr. Wm. D. Johnson, of Batavia. The following officers were elected for the ensuing year:

President, Dr. L. F. O'Neil of Auburn; Vice-Presidents, Drs. George M. Price of Syracuse and Floyd S. Crego of Buffalo; Secretary, Dr. John J. Buettner of Syracuse; Treasurer, Dr. C. O. Boswell of Rochester. The next meeting will be at Auburn.

THE AMERICAN ASSOCIATION OF CLINICAL RESEARCH will hold its fourth annual meeting at 17 W. 43d St., New York City, Nov. 9, in Dubois Hall, N. Y. Academy of Medicine. The president is Dr. Alvin Roy Peebles of Boulder, Col.; the Secretary, Dr. James Krauss of Boston, to whom application for membership may be made.

ABSTRACTS.

HYPERINOSIS, the cause of death in a case of chronic parenchymatous nephritis, Dr. Allard Memminger, Charleston, S. C., *St. Louis Med. Rev.*, Sept., 1911. Male, age 23, dropsical. Diagnosis of large, white swollen kidney, verified post mortem. No accumulation in serous cavities. Fibrinous clot in right heart and vena cava ascendens.

Note. It is somewhat questionable whether in such cases hyperinosis may be considered the cause of death or, indeed, whether there is hyperinosis at all. The late H. F. Formad of Philadelphia, used to dwell on the fact that soft, red clots in the heart and great vessels were formed post mortem and occurred in cases in which death occurred rather suddenly while, on the other hand, any case in which the process of dying was prolonged, that is to say in which the ordinary vital processes including the speed and force of the circulation were much reduced for a period of many hours or several days, allowed the formation of fibrinous clots, unless there was a surcharge of carbon dioxid or other condition tending to prevent coagulation. It is also questionable whether the author is right in ascribing dropsy to constriction of the vessels with fibrinous clots. It is of interest to note the occurrence of anasarca without cavity dropsy and some of our readers may be able to explain this point. Another point for discussion which must occur to everyone who quantitates albumin in urine, instead of judging by the bulk of the moist coagulum, is as to the actual effect of an albuminuria. In the present case, the loss of albumin was much more than in the average chronic Bright's and rather high for an acute case. Very seldom does the loss amount to 5 grams a day. Very seldom does the urinary loss amount to so much as may be added to the ingesta and as may, apparently, be assimilated.

TUBERCLE BACILLI IN BLOOD.—R. Hildermann and I. Losses, *Deutsche Med. Woch.* No. 19, 1912, have found tubercle bacilli in the blood in about a quarter of pulmonary cases examined, the finding being unfavorable but not indicative of generalized miliary tuberculosis.

ANAPHYLACTIC POISONING BY ORGANIC EXTRACTS.—I. Bauer and F. Wusthoff, *ibid.*, No. 9, 1912, have found that extracts of various organs of guinea pigs in physiologic salt solution uniformly produce anaphylaxis when injected into the same animals, often causing death.

SYSTEMIC INFECTION THROUGH THE PHARYNGEAL LYMPHOID RING CALLING FOR SURGICAL INTERVENTION.—C. B. Wylie of Chattanooga (*Jour. Oph. and Oto-Laryn.*, Aug., 1912.) details the anatomy of the pharyngeal ring and describes the symptoms of lacunar inflammation. The complications are much more important than the local condition. There is no part of the human economy where the lymphatic system will so rapidly disseminate septic materials as the lymphatic ring of the pharynx. Clinical experience makes it possible and often quite probable that the source of various inflammations of the serous membranes, in which no other definite cause can be discovered, is to be sought for in this locality. Tuberculosis in different parts of the body, muscular and articular rheumatism, nephritis, and diabetes may have their beginnings here. The size of the tonsils have but little bearing upon the symptoms (other than mechanic.) Many times do we find pronounced local or constitutional symptoms where the tonsil is quite small.

Operation is advised and a method for removing the entire gland is given.

DUODENAL RESEARCH—Von Oelfele and Bullinger, *New Yorker Medizinische Monatschrift*, July, 1912. The authors port in extenso on experiments and experiences with their own modification and improvement of Einhorn's duodenal tube; claiming to obtain the duodenal fluids in greater amounts than is possible with other instruments. They make numerous observations of interest to the specialist in this field but draw no practical conclusions.

An especially interesting observation is this: That large amounts of water may pass a stomach containing nutriment with little or no admixture; the food remaining in the fundus, the water apparently passing over it.

Zeutralblott feur Chirurgie

No. 46, Nov. 18, 1911.—Franz Fink reports a case of Gastric Ulcer symptomatically cured by gastero-enterostomy for 2 years. Then recurrence. At a second operation the gastro-enterostomy opening was found to have closed through the action of adhesions. After resection of the ulcer again recovery, one year to date.

Reports from the convention of German Natural Scientists and Physicians. September, 1911. Stoffel treats spastic paralysis by selective neurotomy in the distribution of the spastic muscles thereby weakening these sufficiently to restore the balance with the sound muscles.

No. 50.—From the same reports. Wilms reports two successful cases wherein he used a rubber drain to replace the common bile duct, leaving it in situ covered by omentum or the colon. He recommends this where other measures seem impossible.

No. 50, December 16.—Meeting of German-Northwestern Association of Surgeons, October, 1911. Brewitt of Lubeck reports seventeen cases of urethral stricture treated more successfully by electrolysis than by dilatation, three or four treatments of a few minutes each with a two milliamperé current being the average course.

No. 2, January 13, 1912.—Pressure paralysis following Es-marck Constriction. Wilhelm Wolf discusses recently reported cases. He deprecates wholesale condemnation of the measure in view of the fact that practically all such cases ultimately recover. Besides careless application of the bandage he suggests long-standing syphilis as responsible for this accident in most cases.

No. 4, January 27, 1912.—Gastric motor insufficiency due to Perigastritis of Gonorrhoeal origin. I. I. Grepow, argues "post hoc" that adhesions about the pylorus with symptoms, as a sequel to pelvic disturbances are of gonorrhoeal origin. He cites two cases operated upon by himself which showed the effects of perigastritis, but he brought forward only the history of the case to prove gonorrhoeal origin—a plausible but by no means conclusive argument.

No. 5, February 3.—C. Hubscher recommends hourly exercises in situ to prevent muscle atrophy following injuries to extremities requiring plaster splints.

Experimental Graves Disease

No. 5, February 3.—Bircher claims to have elicited typical symptoms in dogs by intraperitoneal implantation of pieces of thymus gland, freshly removed from living patients with enlarged thymus, or from those recently dead during narcosis in whom enlarged thymus was found.

No. 10, March 9.—Max Boruch produced experimental Graves Disease by injection of fresh ground human thyroid in of using expressed thyroid juices for Graves Diseases, criticize type.

No. 19, May 11.—Klose & Lampi, in defense of their method of using expressed thyroid juices for Graves Diseases, criticize above methods as regards propriety of results and accuracy of dosage.

No. 27, July 6.—Boruch, in rebuttal vs. Klose & Lampi.

No. 9, March 2.—Laminectomy under Local Anaesthesia. L. Heidenhain reports having done numerous major operations under local anaesthesia after Braun. Preliminary morphia than 1-2 per cent. novocain with suprarenin. He reports in detail a trepanation for brain abscess and a multiple laminectomy by the same method. He quotes Braun as saying that he used as much as 250 ccm. of the 1-2 per cent. solution at one sitting without sequelae.

Edward Streissler recommends a posterior route with small anterior counter incision for the removal of cervical ribs or diseased first ribs.

January 18, 1912.—From the Public Congress of Surgeons, Berlin, Muhsam reports a successful implantation of saphenous vein to replace 6 cm. of urethra removed for impenetrable stricture..

No. 12, March 23.—Surgical Society of Breslau. Kuttner reports a hernia of the posterior wall of the bladder through the urethra in a 9 week old infant. Recovery following suprapubic opening with hitching up of the posterior bladder wall to the abdominal wound.

No. 6, February 10.—Making a ligament out of free periosteal flaps, Katzenstein. He replaced a torn tibio-navicular ligament with a double periosteal implant with reformation of the arch.

No. 11, March 16.—Momburg at Bier's Klinik performed a similar operation through two small incisions, using strips of fascia lata instead of periosteum.

No. 16, April 20.—Incision for Gall Bladder operations. Fritz Konig, of Marburg. The author's incision begins slightly to right of the midline somewhat above the predetermined margin to the liver, passes down curving to the right, ultimately dividing the rectus sheath and muscle directly across, avoiding large vessels and nerves. This renders accessible: 1. Gall Bladder; 2. Stomach; 3. Appendix.

The author prints 4 photographs of cases showing post-operative scars. He makes a convincing argument in favor of the incision.

A new radical operation for prolapse of the uterus by Hans Hans. This operation is a ventro fixation with a vengeance.

1. Transverse incision.

2. Removal of tubes, upper fundus and mucosa of uterus leaving two lateral "wings."

3. The "wings" are brought out through the peritoneum and between the recti and sewed out flat like two petals of a flower on the external surfaces of the recti.

4. Fascial closure leaving a central opening for through-and-through drainage into the vagina from the abdominal surface.

No. 18, May 4.—On the technique of paravertebral peripheral anaesthesia. Hans Finsterer succeeded in 4 cases out of six in obtaining anaesthesia sufficient for laparotomy by injecting the nerve trunks close to the vertebral column.

No. 26, June 29.—Supraclavicular anaesthesia. Edward Borchers reports 35 cases of operation on the upper limbs after novocain-adrenalin injections into the brachial plexus. Paralysis resulted in all cases of about 4 weeks duration.

No. 29, July 26.—Felix Franke, Treatment of *Ecchinococcus* Cysts with Formalin. Franke refers to former communications on this subject recommending the following technique: Regardless of the size of cyst: 1. He opens cyst and delivers contents and as much of sac wall as possible. 2. Washes out with 5 per cent. formalin solution in glycerine, up to 100 cc., with or without water. 3. Wipes out free solution and closes cavity without drainage.

Przewalsky calls attention to the maximal gaseous distension of the rectum as a most valuable early sign in appendicitis with peritonitis.

No. 31, July 23.—Carl Springer, in reference to above, states that it was long known in Austria as he got the hint in Hochnegg's Clinic 10 years before.

It is an invaluable sign in children and has been of greatest service to him. He never delays operation when the sign is present.

No. 35, 1912.—Hyperaemia or lymphatic stasis. Gelinsky of Berlin is of the opinion the obstruction to the lymph current is as important as if not more so than that to the blood current in the so-called Hyperaemia of Bier. He gives good general directions on application of the treatment.

TOPICS OF PUBLIC INTEREST.

The cornerstone of MT. ST. MARY HOSPITAL, Niagara Falls, was laid on Monday, Sept. 30, Bishop Colton officiating.

22 MEDICAL SCHOOLS have been disqualified by the Regents of N. Y. State, as not conforming to the present requirements. Graduates of these institutions, however, may establish their right to a license by passing a special examination.

EXAMINATION FOR APPOINTMENT TO THE PUBLIC HEALTH SERVICE. Candidates for admission to the grade of assistant surgeon will be examined at the Bureau of the Service, 3 B St., S. E., Washington, D. C., Monday, Nov. 11, at 10 A. M. Candidates must be between 22 and 32, must furnish testimonials as to character, must have had one year's interne service or two years' practice. The salary is \$2,000 with quarters or allowance of \$30 per month. The salary is increased by promotion and term of service, so as to aggregate about \$4,500 at the end of fifteen years.

RECENT APPOINTMENTS, BUFFALO HEALTH DEPARTMENT. Dr. D. V. McClure has been transferred from the medical school examinership to be Physical Examiner in the Bureau of Child Hygiene at a salary of \$2,000.

Dr. Joseph C. O'Gorman has been promoted from Milk Examiner to Dr. McClure's former position, at a salary of \$1,200.

The position of Secretary to the Assistant Health Commissioner has been established, with a salary of \$900. This position will be filled by Miss Flavilla Wende, daughter of the late Health Commissioner, Ernest Wende, M. D.

Miss Josephine C. Lynch has been appointed female attendant in the Bureau of Child Hygiene at a salary of \$720.

Dr. James H. Donnelly has been appointed Tuberculosis Inspector, vice Dr. Otto R. Eichel, resigned, at a salary of \$1,000.

Dr. Edward P. Forrestel has been appointed assistant medical school examiner.

But, why not pay the City Physicians adequate salaries also?

BETTER LIGHT FOR NIGHT SCHOOLS is recommended by Drs. F. Parks Lewis, H. W. Cowper and Frank Farrell, committee of investigation for the Buffalo public schools. This reminds us that, in the old days, the boys entering the Central High School were seated in the dark corner. This was a natural courtesy to the senior classes and proper enough, although the tissues of the incoming class were most sensitive. And it must be admitted that the lenses which were required during the next year or so gave us a more intellectual appearance and are very convenient in keeping dust out of the eyes.

Lady Albina Brodrick is visiting America to study nursing methods mainly as expounded by Adelaide Nutting of Columbia. Lady Brodrick will apply the information gained, as well as the money which she hopes to raise, in the interests of the Irish Hospital in County Kerry. For some reason, our Irish citizens are most loyal to the mother country, especially after two or three generations, than any others. We have in mind a family of enthusiastic Irish girls and boys. They and their parents were born in America; one parent is German, the other is Scotch-Irish. In contrast to such sentiment, the following incident occurs to us. Last spring, at Albany, one of the prominent old doctors was speaking of the fewness of years remaining to him. We asked him if he did not ever wish to go home. "Oh, yes," he replied, "I am going to take the 9:45 train tomorrow morning." When we made it clear that we referred to his birthplace, he made it equally clear that he had no love for his motherland, and that he was purely an American.

INCREASED REQUIREMENTS IN MEDICAL EDUCATION. Next year, matriculants in N. Y. State will be required to have had one year of college training in specified studies.

HIGHER DEATH RATE NEEDED. In the U. S. three out of four murderers are not brought to trial and only one in a hundred man-killers is killed. In Germany, the chances of punishment are said to be 95 per cent. Without discussing the pros and cons of capital punishment, it is obvious that the relative safety of murderers favors murder. It has been stated that the mortality rate of murderers is far less than that of railroad switchmen. In 1911, there were 119 deliberate murders in New York, while in London, where poverty of desperate degree is far more prevalent, there were only 19.

The *Buffalo Progressive* of Oct. 10, 1912, lists 10 accidental deaths, 3 murders and 4 suicides for the city, for the week preceding. The total average number of deaths per week for Buffalo should be about 140. Ordinarily—we were about to say normally—one death in 10 is by violence. No one charges the medical profession with the responsibility for violent deaths directly, but, whenever gross death rates and failures to secure ideal average longevity are considered, the onus is placed on our profession and few make even the 10 per cent. allowance.

SCHOOL INSPECTION. Out of 49,764 children examined in Buffalo in the last two years, 19,456 had defective teeth, 6,563 hypertrophied tonsils, 3,959 defects of vision. Health Commissioner Fronczak is using these statistics as an argument for the

- appointment of dental inspectors and establishment of dispensaries.

INCREASED SALARIES WANTED. Among other requests for salary increases, under consideration by the Buffalo common council, are the following: Medical Examiner, \$3,500 to \$4,200; Assistant, \$2,500 to \$3,000. As Dr. Jekyl, we are most emphatically in favor of dental inspectors and dispensaries and of raising professional salaries, but we must confess that as Mr. Hyde, paying from 15 to 30 per cent of the gross receipts of property in city taxes, we can appreciate the narrow-minded stinginess of many.

INCREASING ACCIDENT REPORTS. The N. Y. Association for Labor Legislation (Paul Kennaday, Sec'y., 131 E. 23d St., N. Y.,) reports 19,567 industrial accidents for the quarter ending Sept. 30; 13,731 occurred in factories and 5,628 in building and engineering work. The former are about 1,000, the latter about 3,000 more than for the corresponding quarter year of 1911, indicating probably not so much actual increase as more thorough reporting and, probably, a change of classification. The Department of Labor, even with its increased staff, is unable to maintain an adequate system of inspection. The fact that the accident rate, as reported, doubtless with many omissions, especially of minor accidents, is nearly 1 per cent for the whole population, regardless of age or sex or occupation, shows that the problem needs more thorough attention. Remember these items, as well as the automobiles, railroads, homicides and others, when some orator, basing his remarks on general disease and mortality rates, is telling how little medical science has accomplished, after all.

COLLEGE OF MEDICINE OF SYRACUSE UNIVERSITY. The trustees announce that Professor Leverett Dale Bristoll, A. B., Wesleyan, M. D., Johns Hopkins, has been called from Minneapolis as professor of bacteriology. Also the election of Earl V. Sweet, A. B., Colgate, M. D., Cornell, as Instructor in Histology.

The election of Mr. John R. Rice, B. S. Wesleyan, to be instructor in the Department of Hygiene and Preventive Medicine and Assistant in the Municipal Laboratory.

The election of Albert G. Swift, M. D. Syracuse University of New York City to be instructor in Clinical Surgery.

The election of John W. Cox, M. D., Syracuse University, to be instructor in Pathology.

THE NEW YORK POST-GRADUATE SCHOOL AND HOSPITAL has recently been re-organized. Dr. James F. McKernon has been elected president in place of Dr. George N. Miller, resigned. The officers now are: President, James F. McKernon, M. D.; Second Vice-President, Edward Quintard, M. D.; Treasurer, William Fahnestock, Esq.; Secretary, Arthur F. Chace, M. D.; Secretary of the Faculty, George G. Ward, Jr., M. D.; Superintendent, H. T. Summersgill, M. D.

A DETERMINED effort is being made to secure the combination of three Baltimore medical colleges, viz.: the University of Maryland, the College of Physicians and Surgeons, and the Baltimore Medical College. In order to insure the success of such a plan, it is thought that an endowment fund of \$500,000 to \$1,000,000 should be raised.

THE MEDICAL COLLEGES of the State of New York, acting under the direction of Commissioner Porter of the State Health Department, are arranging a systematic course of instruction in public health and the prevention of disease. The plan of instruction is being prepared by the following committee: Dr. William A. Howe, deputy state commissioner of health; Dr. John L. Hefron, Syracuse University College of Medicine; Dr. Royal S. Copeland, of the New York Homeopathic Medical College; Dr. Bensel, of the Medical Department of Columbia University; and Dr. W. H. Park, of the Bellevue and New York University Medical College.

THE BELL TELEPHONE SERVICE IN BUFFALO HAS DISCONTINUED ITS MORNING CALL so that physicians having to take early trains will have to depend upon the Frontier or upon an alarm clock. We recommend a ratchet-and-cog system for public service legislation so as to secure a movement only in the direction of improved service and lessened cost of any public utility.

MUNICIPAL TUBERCULOSIS HOSPITAL. The medical committee has decided to advise the erection of an administration building in the immediate future, the hospital proper to be built in two or three years. Meanwhile, the supervisors are considering a temporary addition to the Erie County Hospital, which is overcrowded.

CONDEMNATION OF MEDICAL NEWS. The Baltimore (Maryland) County Medical Association has passed a resolution (1) condemning the publication of patients' names, diseases or condi-

tions requiring operation, and names of attendants and of hospital, in the daily press, as contrary to the principle of professional secrecy; (2) establishing a list of offenders and pledging the members not to consult with them nor to use the hospitals. While agreeing with the general spirit of these resolutions, it must be admitted that in most cases the publication of patients' names and diseases or conditions requiring operation, as well as the fact that the patient is treated at a given hospital, is not contrary to the wishes of patients and their families, that such matters are strictly news when prominent persons are concerned and that for persons in private life, the notification is a convenience to friends. It is rather an extension of the code of ethics to demand that the name of a hospital shall not be publicly mentioned and we, personally, do not intend to ostracise any member of the profession because his name is mentioned in connection with a case, unless it appears that he is responsible for the item and is deliberately seeking advertisement.

ANTERIOR POLIOMYELITIS. The Buffalo epidemic began with 2 cases in January; there being no others till 1 occurred in May. In June there were 3, in July 62 with 4 deaths, in August 124 with 10 deaths; in September 86 with 13 deaths, a total of 278 cases and 33 deaths for nine months. In October, there were 30 cases and 8 deaths. Dr. W. J. Rosenau, of the U. S. M. H. and P. H. Service, a classmate of the editor's at the University of Pennsylvania, and appointed with him to the service, has recently reported the transmission of the disease from monkey to monkey by the common fly, *Stomoxys calcitrans*, six of twelve healthy monkeys contracting the disease.

DEATH OF MILLIE-CHRISTINE. This two-headed and four-legged woman, or rather these twins, for the two heads had distinct personalities and did not even sleep at the same time necessarily, have recently died, the plural being shown to be more appropriate by the death of one head several days before the other. The twins were negresses, born in slavery and once sold for \$40,000. Aside from the teratologic interest in the case, one can not avoid expressing sympathy for the terrible ordeal of the second twin, after the death of the sister head and while awaiting a certain doom under the most shocking conditions.

THE NOBEL PRIZE for the most noteworthy achievement in medicine during the current year was awarded on Oct. 10, 1912, at Stockholm, to Dr. Alexis Carrel of the Rockefeller Institute for his work in the suture of blood vessels and transplantation of organs. The prize was \$39,000. Dr. Carrel was born in

France in 1873, received the medical doctorate in 1900 and came to America in 1903.

THE NIAGARA FALLS WATERWORKS have been completed at a cost of over a million. About 44 miles of new mains and a filtration plant are the most expensive items. Typhoid is said already to have shown a decline.

NEW FACTORY LAWS in New York State, limit the working hours of women to 9 a day and 54 a week, and provide that no woman shall be employed within four weeks after giving birth to a child. Children will not be allowed to work in factories unless over 14 years and with a certificate of health. The Commissioner of Labor is also authorized to close factories not clean and sanitary and not maintaining proper toilet facilities, including hot and cold water and individual towels, whenever the industry involves poisonous dust, gases and fumes. Further legislation is contemplated. We venture to suggest that labor laws and educational regulations should include a provision for absence from duty for one or two days a month, on certificate of necessity by a physician, in the case of any woman or girl. So far as schools are concerned, it should be provided that such absence should not detract in any way from class standing.

NURSE FOR POST-PARALYTIC CASES. The Buffalo Department of Health has engaged a nurse to give massage and other care to cases of infantile paralysis. She will work exclusively under the direction of the attending physician for cases deserving charity.

THE MEDICAL DEPARTMENT OF THE UNIVERSITY OF BUFFALO has registered 59 students in the Freshman class, beside several special students. A wholesome sign is the fact that the four classes are nearly equal in numbers, allowing for the natural weeding out process and the unprecedentedly large registration last year. It is gratifying, also, to note that alumni are sending their brothers and sons to their alma mater.

EXAMINATION FOR MINE SURGEONS.—The U. S. Civil Service Commission announces an examination on Nov. 20, at various places. One vacancy exists at present. The salary ranges from \$2,000 to \$3,000. Application should be made to the Commissioner at Washington, or to the Secretary of the Board of Examination at the following places in New York State. (C. H. means Custom House.) Binghamton, Buffalo, Elmira, Ithaca, Jamestown, New York, C. H., Ogdensburg, C. H., Plattsburg, C. H., Poughkeepsie, Rochester, Syracuse, Troy and Utica.

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A Monthly Review of Medicine and Surgery

EDITOR

A. L. BENEDICT.

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A man's greatness is shown by his treatment of the little man.

Humidity

For the next six months, the majority of our population will spend a large share of their time indoors, with a temperature of about the same as during the summer, while wearing about twice as much clothing. And, for the most part, they will exercise almost as much and will eat more heat-producing food. While theoretically, houses, schools and work rooms should be kept at a temperature correspondingly less than in summer, or else underwear should be changed on entering and leaving the indoor environment, most persons feel more comfortable if the summer temperature is maintained artificially and the latter device is impracticable and, by experience, unnecessary.

At the same time, commercial and entirely disinterested literature regarding the baneful effects of dryness are being scattered and careful householders are, more or less systematically, placing dishes of water to secure a proper humidity by evaporation. Ordinarily, in this climate, the out-door humidity is about 30 or 40 for a dry day in winter, 50 or 60 in summer and according to circumstances, the out-door humidity runs up to 80, rarely higher. Out-door air merely admitted to a room and warmed, gains in its capacity for holding water without condensation; in other words, loses in (relative) humidity. Thus, any heating system which does not communicate water of oxidation to the air, causes a marked drop in humidity. In spite of the admission of fresh air and the addition of water of respiration, the out-going

air, though relatively dry, tends to carry off more water than enters so that the humidity gradually falls, the warm furnishings of an ordinary room being able to take up any sudden moderate excess. Thus, the indoor air will usually have a humidity of 20-40 and, with the torsion hygrometer which is only approximately accurate may even register zero.

Superficially considered, an environment in which anything stands at a tenth to a half of the natural standard, impresses one as dangerous, especially when the change is sudden and repeated. But it must be remembered that percentages in (relative) humidity greatly exaggerate the actual quantity of water present in the air since they depend largely on temperature and are based merely on the potential absorptive capacity of the air without precipitation. To speak of passing from a humidity of, say, 60 to 10, suggests something as serious as Caisson disease but it is infinitesimal as compared with stepping from air into a tub of water and out again, yet the latter change, equivalent to a leap from say 20 to hundreds of a per cent. and vice versa, is practiced with impunity by most of us at frequent intervals.

It should, of course, be understood that in discussing in-door humidity, we assume sufficient ventilation, proper temperature, and adequate out-door exercise. The defense of dry indoor air must also fall to the ground if it can be shown that relative lack of humidity entails any alteration in gaseous content, radiant properties or anything else hygienically necessary. Unduly moist indoor air, with condensation of water upon windows usually indicates an excess of carbon dioxide while the latter, though probably not in itself harmful till such proportions are reached as interfere with respiratory osmosis, is usually attended by an excess of unmeasurable impurities of other nature. Dry indoor air may obviously be impure without showing this convenient index of contamination. But, generally speaking, radiation systems of heating allow more uniform distribution of heat, better ventilation and greater freedom both from drafts and from atmospheric impurities due to the source of heat than any other method. The ultimate issue, therefore, is whether the dryness of the air, in and of itself, is harmful.

It goes without saying that low atmospheric humidity, natural or artificial, tends to increase the loss of water from the body by insensible perspiration and respiration and hence tends to reduce elimination by the kidneys and bowel. Obviously, therefore, more water must be taken and, within reasonable limits, the more water is run through the body, the better. The person who does not compensate for the additional evaporation which takes place in dry air, will suffer in various ways but, as a matter

of fact, such a person will usually follow a regimen insufficient for the physiologic processes requiring water as a vehicle, under any circumstances. Under no circumstances of humidity nor even of immersion, can the human body absorb sufficient water without drinking.

The question therefore resolves itself into this: Is the relative excess of evaporation in dry air harmful locally? For the skin, generally, it is universally conceded that perspiratory activity is beneficial up to the point at which it indicates excessive physical strain, excessive temperature, maceration, or is symptomatic of some pathologic condition. Under ordinary circumstances, urine, insensible perspiration and respiratory evaporation are approximately equal and amount to about a liter a day each—the last somewhat less as a rule. There is an impression that respiratory vapor is pulmonary and is added to the air before it is expired. As a matter of fact, it is largely inspiratory, added to the air as it passes over the nasal turbinates, nasal breathing being required partly to filter out by the nasal hairs and to catch upon mucous surfaces gross dirt; partly to warm, and partly to moisten the air before it reaches the lungs. It is conceivable therefore that the extra demand made upon the turbinate tissues may result in local lesions or that, if they fail to supply the necessary amount of moisture, the lungs may suffer. Indeed, it is not merely conceivable but a matter of actual knowledge that certain respiratory lesions require moist air as part of the therapeutics of the case. For the person of average health so far as the respiratory passages are concerned empiricism is better than theory. The writer's experience is that catarrhs of the upper and lower respiratory tract are less frequent with dry than with moist indoor air, though this may be partly due to the better control, more even distribution of heat, and possibility of more efficient ventilation without drafts by radiation methods.

The only other local ill effect which can be anticipated from dry indoor air, is evaporation from the conjunctiva. With an abundant ingestion of water and a normal lachrymal apparatus, this seems rather a far-fetched hypothesis.

Subject to revision, therefore, we advocate radiation systems of heating, preferably by electricity when the public service commission has done away with extortionate profits or wasteful methods of production. And we question whether the troublesome, usually filthy and intermittently supplied pan of water had not better be cleaned and relegated to the attic—if the steam-heated dwelling has such a place.

Our Platform

1. The most important matter for the individual physician, the medical journal and the medical society is practical medicine; next medical science.

2. In all questions of professional ethics and policy, honesty, fairness and efficiency must take precedence of purely theoretic or arbitrary standards.

3. The balance of professional supply and demand must be restored, mainly by enforcing educational requirements.

4. Loyalty to professional organization on the part of the individual physician and vice versa—the latter implying provision for the expression of individual opinions and rule of the majority.

5. Extension of methods of securing professional welfare by cooperation including protection of the individual member by the profession, and care of the disabled and superannuated.

6. Revision of medical nomenclature to avoid the obloquy due to the use of incorrect words—such revision and the supervision of proposed new terms to be relegated to some central and taxation or popular contributions.

7. Control by and in the interests of the profession as a whole, of the medical side of all institutions supported by public taxation or popular contributions.

8. Professional organization to accomplish popular instruction and legislation in medical, sanitary and hygienic matters, with due regard to the paramount rights of the community and so as to secure an impartial representation of the profession.

Second Class Postal Rates

As we have stated before, this Journal does not ask charity from the Postoffice, any more than from anyone else. While we believe that periodical literature is, on the whole, a great educational factor in modern life, there can be no question but that the multiplication of certain kinds of magazines tends to an enormous waste of time. Mere reading is not study. Nor would it be practicable to frame laws or to interpret them if framed, so as to discriminate between educative and non-educative periodicals.

But we do believe that the Postoffice Department should give the lowest rates compatible with self-support and that the rates on periodicals should be based on ordinary principles of wholesale as opposed to retail business, on the fact that such mail does not require the personal attention requisite for letters, that time may be saved in handling it because slight delays make no material difference with the interests of publishers and recip-

ients, that except for the calories of locomotives, horses and men in hauling and transporting, it costs no more to deliver a half pound magazine than an ounce letter. It should also be realized that the circulation of magazines involves an enormous amount of first class correspondence, and that the maintenance of the latter should be allowed for in the rate charged for second class mail.

The P. M. G. estimates that second class matter actually costs the department 9 2-3 cents per pound. Any material increase in such mail, should, therefore, lead to an enormous deficit. The facts are as follows: (Overstreet Postal Commission.)

	Weight of (Paid) 2d Class Matter	Deficits.	Surplus.
1907	712,945,176	\$ 6,653,283.00	
1908	694,865,884	16,873,223.00	
1909	723,233,182	17,441,719.00	
1910	817,428,141	5,848,560.88	
1911	893,309,893		\$219,118.12

The parcels post which goes into operation January 1st, next, will be of great benefit to doctors. The following are the rates established:

	First Pound	Each Additional Pound	Eleven Pounds
Rural route and city delivery.....	.05	.01	.15
50 mile zone.....	.05	.03	.35
150 mile zone.....	.06	.04	.46
300 mile zone	.07	.05	.57
600 mile zone.....	.08	.06	.68
1000 mile zone.....	.09	.07	.79
1400 mile zone.....	.10	.09	1.00
1800 mile zone.....	.11	.10	1.11
Over 1800 miles.....	.12	.12	1 32

Our Over-Crowded Profession.

"The whole number of physicians in Buffalo is 78, including Homœopathic, Botanic, Thompsonian, Uroscopic et id omne genus. The number of *regular* practitioners (we cannot distinguish as *legal*, since the law now recognizes equally those of every order) is about one-half of the above number. Our population is a little short of 30,000. We have thus a professed practitioner for less than every four hundred. * * * that all cannot subsist on the necessities of disease is reduced to a mathematical demonstration."

The above is from the BUFFALO MEDICAL JOURNAL of 1845 (page 162.) At present, the list is 660 physicians, to about

420,000. As about 60 physicians are engaged in other business, moved away, dead or fully retired, the present ratio is about 1: 700. While the Homœopaths are now practically reunited with the "regular" practitioners and the other schools mentioned are dead issues, the osteopaths, optometrists, Christian Scientists, etc., bring the ratio about to its original basis. In addition, it must be remembered that there is far less disease than in 1845, much more paternalistic care of the sick and relatively insignificant demand for medical services in the outlying districts.

Our predecessor goes on to say that many physicians sought Buffalo as a promising western town and that, on account of disappointment, more than the existing number of physicians had moved away during a period of ten years. As we stated in the Aug., 1912, issue, only about a quarter of physicians practicing here in 1899 and recorded in a group picture, had departed, either to other places, other occupations or to a better world. In other words, the profession is much more stable and probably really better supported than 67 years ago. And, as did our distinguished predecessor, we are glad to welcome newcomers; however little the statistic need for them.

PERSONALS.

Dr. Charles W. Hennington of Rochester, Associate Editor, is compiling biographic data about Dr. E. G. Munn of Rochester, the first ophthalmologist in western New York. He lived from 1804 till Dec., 1847. We do not find an obituary notice in our file of the JOURNAL. Any one having information about Dr. Munn will please communicate with Dr. Hennington.

Dr. A. E. Bartoo, University of Buffalo, 1888, long a practitioner of Nebraska, has recently returned from a year's absence in Brazil and has opened an office at 353 Glenwood Ave., Buffalo.

Dr. Arthur L. Hinman of Clyde has been appointed from the state civil service list as Assistant Surgeon to the State Soldiers' Home, succeeding Dr. Edward Tierney.

Dr. A. J. Martin of North Tonawanda will return about Nov. 1, from a six weeks' trip to the Pacific coast.

Dr. Robert P. Bush of Horseheads has again been nominated by the Democrats for member of the assembly.

Dr. E. T. Bush of Horseheads has gone to New York for four months' post graduate study.

Dr. F. St. J. Hoffman of Buffalo, has recently returned from Panama, South America and Jamaica.

Dr. Horace Lo Grasso, a former Buffalonian, leaves his service at Raybrook to become Resident Physician at the J. N. Adam Hospital at Perrysburg.

Dr. Edward C. Perry recently suffered considerable loss from the burning of his barn along with others. The fires are believed to have been of incendiary origin.

Dr. J. D. Zwetsch of Gowanda has recently returned from a trip to Chicago.

Dr. Max Keiser and Dr. Wm. M. Mehl of Buffalo have recently returned from Europe.

Dr. Joseph S. Lewis of Buffalo, spent a couple of weeks at Point Abino during October, wild ducks appearing in abundance the morning of his departure.

An epidemic of typhoid, probably water borne, is in progress in Troy Pa., and neighboring villages. Troy, with a population of 1500, had 172 cases up to Oct. 26. We have written for a special report but have had no response in time for the present issue of the JOURNAL.

OBITUARIES.

Dr. John W. Burchard, Buffalo, 1884, died at his home in Bradley, South Dakota, August 15, from pneumonia, aged 65.

Dr. Lewis R. Palmer died in Rochester on October 2, 1912, aged 44 years. He was born and brought up in Clyde, N. Y., but lived and practiced in Baltimore and had returned to his home on a visit. Graduated Hahnemann Medical College, Philadelphia, 1892; formerly president of the Maryland State Homeopathic Society; president of the Homeopathic Hospital of Maryland, Baltimore; professor of diseases of heart and lungs in the Southern Homeopathic Medical College, Baltimore. He was buried in Clyde. He leaves his wife and one child. The cause of death was hemorrhage from gastric ulcer.

Dr. William E. Fitsgibbons, Buffalo 1874, died at St. Mary's Hospital, La Salle, Ill., Oct. 3rd, from heart disease, aged 63. He resided at Oglesby, Ill., but had formerly practiced at Wataga and Peru, being health officer at Peru for two years.

Dr. Herbert Paris Sheldon, Buffalo 1879, died at his home in Scotts Bluff, Neb., Oct. 3, from broncho-pneumonia, aged 57.

Dr. Wm. H. Loughhead, Jr., Buffalo 1891, of Andover, died at Hornell, Sept. 12, following an operation for appendicitis, aged 52.

Dr. Charles A. Gorse of Meadow Brook, Orange Co., was shot by his insane son, Oct. 10.

In the 33 deaths of physicians chronicled in the Journal of the A. M. A., Sept. 28, nine were of Civil War veterans. Aside from the historic interest and the heroic association connected with these men, which should not fail to impress the rising generation of physicians, we are at a period of professional change which will probably never be duplicated, and which is of interest in many ways, economic among others. The comparatively sparse settlement of the country in the middle decades of the last century, the occurrence of the Civil War and the development of the West immediately following, in connection with the necessarily low educational requirements of the times, and the incentives to establishing medical schools, led to the graduation of a large number of men and, especially of men past the first flush of youth. It is probable that the medical profession, at present, has a greater proportion of old and retired members than it will have in the future and that by the inevitable high death rate of this part of its membership, and the restrictions on medical education now in force, the next decade will see an absolute as well as a relative decline in total numbers.

Dr. Herman B. Singer of Buffalo, died Oct. 26, 1912. He was born in 1864, graduated at Leipzig in 1893 and has been a resident of Buffalo for many years, being a member of the Academy of Medicine, the County Society and other organizations.

Dr. William Q. Huggins of Sanborn died Oct. 21, 1912. He was born at Roanoke, Devonshire, Eng., but came to the U. S. when a small boy. He received the degree of M. D. from a Cincinnati college in 1861, enlisted Battery E, 1st N. Y. Artillery and served with honor through the Civil War, being wounded several times in battle of Lookout Mountain and being captured during Sherman's march to the sea. He escaped and re-entered

active service, being discharged in April, 1865. In 1870, he graduated in medicine from the University of Medicine, after having spent a couple of years in California recuperating his health. After his second graduation in medicine, he located in Sanborn, where he has since resided and practiced his profession. He was a Mason, an Odd Fellow and a member of various other organizations, including the G. A. R. From his gallant military service, we may gain an idea of his character.

OUR CONTEMPORARIES.

The *Continent* of April 18, emphasizes a fact that physicians sometimes overlook, through familiarity. Under the title of the Superlative Heroes, it pays an eloquent tribute to the courage displayed by patients.

The *Medical Council* will henceforth be continued under the business management of Mrs. J. J. Taylor, widow of the former editor and proprietor, with Dr. Thomas S. Blair long a member of the editorial staff, as editor. We have known Dr. Blair since his student days at the University of Michigan where he already began to show the ability which has characterized his maturer years.

The *Doctor's Factotum* has recently come to our desk, with its periodic contribution of sound practical observation and wit.

The *Dietetic and Hygienic Gazette*, to which we frequently contributed under its former management by Dr. J. C. Slay, and in which Dr. F. W. Barrows of Buffalo, has managed a nursing department, is now under the editorship of Dr. George F. Butler.

The *Homoeopathic Recorder* (Sept. 15, 1912), regards medical unity as impossible but its environment seems to be a quarter of a century behind that of western New York. For instance, while visiting a patient at a homoeopathic hospital—by no means the first we have attended there—we have met about as many old school as homoeopathic physicians and have noticed two type-written schedules of routines to be observed in the care of patients of two men of the old school. Most of the homoeopathic physicians whom we know are members of the unspecified professional bodies.

The *Recorder* states that one of the homoeopathic firms has recently had an advertisement of a book rejected by a "regular"

lieve that the *Recorder* is right in protesting against such exclusion. We should probably regard the work as unscientific also although one of the most scientific and useful books that we have reviewed in the last half year is the work of a homoeopathic author and of a homoeopathic publishing house. But we do not believe that any man or body of men in this age of the world have the right to debar from publicity any utterance expressed in good faith. The more certain we feel that a book or paper is wrong, the less we fear that it can prevail against the truth. The fuller the opportunity for presenting fallacious reasoning, the sooner the fallacy is detected. And, the more one learns, in other words, the more scientific one becomes, the less cock-sure is he of his own absolute accuracy.

The Practical Medicine of India, Sept., 1912, quotes at length from our May issue, Dr. Little's article, "A New Departure in the Medical Expert Matter."

NEW INVENTIONS

Reported especially for this paper by H. B. Willson & Co., Patent Attorneys, 715 Eighth Street N. W., Washington, D. C.

A Complete Copy of any of these patents will be forwarded to any person by Messrs. Wilson & Co., on receipt of ten cents. Persons ordering Copies must give Number of Patent.

J. M. Francis, Detroit, Mich., assignor to Parke, Davis & Co., Detroit, Michigan, 1,039,114, Package.

R. P. Barnstead, Boston, Mass., 1,039,243, Sterilizer.

Otto Schonherr, Christiana, and Johannes Brode, Christiana, Norway, assignors to Norsk-Hydro-Elektrisk Kvaelfaktieselskab, Christiania, Norway, 1,039,325, Process of Making Nitrates and Nitric Acid.

W. D. C. Prideaux, Weymouth, Eng., 1,039,591, Hypodermic or other Syringe.

F. A. Denquer, New York, N. Y., 1,039,708, Physicians' Table.

Wm. Diemer, Toledo, O., assignor to Gendron Wheel Co., Toledo, O., 1,039,709, Invalid's Chair.

Anton Weindel, Leverkusen, near Cologne, Ger., assignor to Farbenfabriken Vorm, Friedr. Bayer & Co., Elberfeld, Ger., 1,039,858, Process for Producing products from Phonols with Formic Aldehyde.

Albert Wolff, Cologne, Ger., assignor to (Mrs.) Marid Steinkruger, nee Engelskirchen, Cologne, Bickendorf, Ger., 1,039,875, Preparation of Formic Esters.

J. W. Allan, Omaha, Neb., 1,039,877, Combination Syringe Case and Supporter.

Alfred Klotch, Munich, Ger., 1,039,962, Hot Air Bath.

A. J. Petter, Los Angeles, Cal., 1,040,238, Bathing Apparatus.

Gustave Fernekes, West Elizabeth, Pa. Assignor to J. A. Snee, West Elizabeth, Pa. 1,038,547. Method of Producing Formalde-hyde.

J. V. McManis & W. L. Sherwood, Kirksville, Mo. Said Sherwood, assignor to said McManis. 1,038,619. Osteopathic Table.

W. T. Merchant, Louisville, Ky. 1,038,623. Hospital bed.

G. M. Rhone, Brownwood, Tex. 1,038,960. Syringe.

CORRESPONDENCE.

Dublin.

The outlook for the progress of scientific medicine in Ireland is not promising. Many causes contribute to stay, or at least hinder original work in this country; not the least of these is politics and very intimately associated with this is religion.

There are two Irelands, a Protestant and a Roman Catholic; all the former are Unionists as are a considerable percentage of Roman Catholics, but the great majority of them are Home Rulers. These latter practically control all public appointments in three-fourths of the country, and of course they appoint to office candidates that hold the same political and religious views as they do. Indeed this same spirit controls all elections of medical officers throughout the country. This applies to the appointment to asylums, coroners, gaol medical officers, medical health officers and a number of minor appointments.

There is little incentive to study after qualification; and inducement to court popular favor by joining friendly and benefit societies such as the Masonic, the Corinthian, the Ancient Order of Hibernians, etc.

Then since the great majority of general medical practitioners shut their open shops and adopted society practice, we have a considerable number of physicians taking club practice at the rate of \$1 a member, for attendance on the member, his wife, and family. Of this one dollar fee he gives half to a pharmaceutical chemist for medicine for each subscribing member. So many medical men in our midst pass their lives in this worse than Egyptian bondage.

By our unequalled Poor Law system of medical relief our poor are well provided for. The whole country is divided into dispensary districts and to each district a medical officer is appointed by the local authorities, subject to the approval by a central board in Dublin. The positions, as a rule, are keenly contested; the emoluments average £300 a year, and in some cases £400. The medical officer holds the appointment for life, subject to good behavior, and on retiring from office gets a pension equal to two-thirds of his income from the office. He is free to attend private patients, when same does not interfere with his dispensary duties; he also gets a month's holiday every year, during which time a substitute is paid to act for him. Hon. Mr. Lloyd George's National Insurance Bill is yet to be seen. It is very far reaching in its effects and so far as the act can be deciphered by a non-legal mind seems well calculated to bring trouble and entail expense on every householder.

Happily for the medical profession in Ireland the medical clauses of the act do not extend to this country. But our brethren in England and Scotland will be hard hit by the act. It is common knowledge that our medical brethren engaged in club practice in England have cruel taskmasters in the members of the club committees; and it was hoped that the incubus would be shaken off by the profession and its members freed from serfdom. But our present ministry is kept in power by a heterogeneous conglomeration of log rollers, and the two strongest parties in the group are the Laborers and the Home Rulers. With one voice the Labor members demanded control of the medical offices and their friends the Home Rulers joined in the demand. Our great organization, the British Medical Association took active steps to protect the profession; its Journal, with its immense circulation and great influence, week after week expressed the contemplated injustice. A defense committee was formed and cooperated with the Council of the British Medical Association.

Hope revived in the breasts of the club doctors; subscriptions came in freely to the defense fund; subscribers came in for the Journal that was doing such good work; when to the astonishment of all, the Secretary of the Council of the British Medical Association, accepted, with the concurrence of the Council, an appointment under the Act. Arnold could claim that five brothers in arms were promoted over his head and that his feats at Saratoga were not duly honored. But our secretary was much honored and greatly trusted; and we had no more idea of his fastening the manacles on his brothers than Washington had that Andre was getting the plans of West Point.

Owing to the great pressure of business the government pushed the Act through the Commons without discussion; with the result that few can ever guess at the meaning of many of its clauses, and today many lecturers are travelling through the Kingdom trying to make plain the unintelligible Act, which came into force July 1, 1912.

A further criticism of this Act and the notice of the Blue Book on Vivisection I must unavoidably postpone until next month.

CLEOPAS.

BOOK REVIEWS

MAKING GOOD ON PRIVATE DUTY.—Practical Hints to Graduate Nurses, by Harriet Camp Lounsbury, R. N., Charleston, W. Va., published by J. B. Lippincott Co., Philadelphia, 208 pages, \$1.00.

While the book contains many little hints as to diet, details of nursing, etc., it deals mainly with the relation of nurse to patient and physician. If every nurse read and followed its teachings, we would meet fewer objections to the employment of a trained nurse on the ground not of direct economy, but that "she is so much trouble."

CATALOGUE OF MEDICAL AND SURGICAL WORKS PUBLISHED IN THE U. S., alphabetically arranged by authors and classified under subjects, 1912-13. W. B. Saunders Co., Philadelphia.

This is a most valuable list of books in print (not necessarily published in the years mentioned). The only favors shown their own house by the publishers is the inclusion of a few advertisements of their own books and the use of the full name instead of an abbreviation to indicate the publishing house. We would suggest, however, a more careful discrimination of authors of the same surname. The editor, for instance has no desire to claim the authorship of "Elementary Organic Analysis." He is surprised to learn that a little book on "Practical Dietetics" is

still in print under a slightly different title. *Golden Rules of Dietetics* is not published by "Mo.," (John P. Morton & Co., of Louisville,) but by "Mb.," The C. V. Mosby Co., of St. Louis. We would recommend a systematic study of this catalogue by prospective buyers and would remind our readers that they can usually be supplied through the *BUFFALO MEDICAL JOURNAL*.

THE WASSERMANN REACTION.—Its Technic and Practical Application in the Diagnosis of Syphilis, by John W. Marchildon, B. S., M. D., St. Louis, published by the C. V. Mosby Co., St. Louis. 103 pages, 11 illustrations and colored frontispiece. \$1.50.

This book, like practically all emanating from this house, depends, not upon the author but upon what he knows, not upon the possibility of competing in already well supplied markets by offering staple goods bearing a name that it is hoped will lure purchasers from other stalls but upon the delivery of goods not elsewhere on sale. The matter is concisely and definitely presented. After a detailed consideration of the evidence regarding the appearance of the reaction in other diseases, the author concludes that, properly conducted, it is specific for syphilis. In over 700 cases of syphilis treated by mercury, the author found that the reaction disappeared in over 75 per cent. and was uninfluenced in none.

THE BLOOD OF THE FATHERS.—A play in four acts by G. Frank Lydstorm, Chicago, published by the Riverton Press, 245 pages, \$1.25.

This is not strictly a medical work, although it deals with the typic high-pressure surgeon (a type mainly of lay creation) and ascribes the significant incidents in the plot to heredity. It is an exciting story of the conflict between professional and domestic interests, culminating with kleptomania and hydrocyanic acid on the part of the doctor's wife, thus leaving him free for a sequel. In fiction, undesirable persons have a tendency to remove themselves at critical periods, to the satisfaction, tinged with forgiveness and regret, of all concerned. In real life, similarly undesirable persons seem singularly endowed with resistance to shock and infection, suicidal impulse, etc., and to attain a considerable degree of longevity.

THE PRACTICE OF MEDICINE.—A manual for Students and Practitioners. By Hughes Dayton, M. D., formerly of the Cornell University Medical School, New York. New (2d) edition, thoroughly revised. 12mo, 326 pages. Cloth \$1.00, net. The Medical Epitome Series. Lea & Febiger, publishers, Philadelphia and New York, 1912.

While it is the custom to condemn quiz compends and condensed medical works of similar nature, they will persist just so long as the examination system requires attainments best or

at least most easily secured through their use. Personally, we do not share this prejudice. The late Henry F. Formad, in teaching pathology used to lay stress on the idea that the man who simply knew what diseases might involve a given organ or might give rise to a group of symptoms, was, on the whole, more apt to make a correct diagnosis than the one much more skilled in pathologic and diagnostic methods but with a hazy notion of the conditions that might be encountered. Quite apart from the needs of the under-graduate student, the practitioner is likely to develop skill and information in detail but to lose his bird's-eye view of diseases. Hence the value of works like the present, which enable one to refresh his memory all the better by omitting a mass of detail already mastered or easily acquired. The trend of modern thought is well illustrated by the fact that this excellent compend commences with a discussion of immunity and ignores temperament and diathesis, the tongue, pulse, etc., with which all orthodox courses in medicine formerly started.

ELEMENTARY BACTERIOLOGICAL AND PROTOZOOLOGY: THE MICROBIOLOGICAL CAUSES OF THE INFECTIOUS DISEASES. By Herbert Fox, M. D., Director of the William Pepper Laboratory of Clinical Medicine in the University of Pennsylvania. 12mo., 237 pages, with 67 engravings and 5 colored plates. Cloth, \$1.75, net. Lea & Febiger, Philadelphia and New York, 1912.

One of the best tests of a man's attainments is what he does not know. A few years ago, we had most elaborate schemes of the life cycle of the variola-vaccinia organism. Fox briefly discusses small pox as a disease of unknown origin. Ultra-microscopic bacteria are not even indexed. Throughout, the text is concise and accurate and the book may be characterized as anaerothermic.

MATERIA MEDICA AND THERAPEUTICS. By Reynold Webb Wilcox, M. A., M. D., LL. D., New York. Published by P. Blakiston's Son & Co., Philadelphia, 8th revised edition, cloth, 832 pages, \$3.00.

Part I deals with definitions, pharmacopoeial preparations, prescribing, etc., and then discusses the materia medica under the general divisions of Inorganic including non-metals and metals; and Organic, including synthetics, vegetable and animal drugs, the last two being sub-classified according to chief pharmacologic actions. Part II discusses pharmacology and therapeutics. The older technical terms indicating physiologic action, are retained only in subheadings. For example, there is a division dealing with "drugs acting upon organisms which infect the human body, or upon processes going on within it:" "drugs acting on the blood" are subdivided according to their action on the plasma, red corpuscles, white corpuscles and coagulability. The author, by avoid-

ing prolix statements, has condensed a complete work into reasonable limits and the publishers have struck the happy medium between fine type and lack of paragraphing, and unnecessary spreading of printed matter. They have also used a paper which is thin but not transparent nor friable. We mention these details to show how a full text book on a lengthy subject has been put into a comparatively small, light and in either sense, a handy volume.

TEXT BOOK OF HUMAN PHYSIOLOGY, by Albert P. Brubaker, A. M., M. D., Philadelphia, published by P. Blakiston's Son & Co., Philadelphia, 4th edition, 736 pages, 1 colored plate and 377 illustrations, \$3.00.

This edition is dedicated to "Kenneth M. Blakiston, Loyal Friend, Courteous Gentleman, Generous Publisher," a tribute not only well deserved personally, but a wholesome precedent for the recognition by the medical profession generally of the various professions which assist in various ways in the advance of medical knowledge. The interminable chapter on muscular contractility, so often found in text books on physiology, is condensed within reasonable limits, and the various topics are well treated in the light of modern discoveries. We notice two minor flaws: the special senses are not clearly classified and listed and the section on articulation (speech) is quite inadequate. For instance, it is stated that the vowel sounds, a, e, i, o, u, are laryngeal sounds modified by the superposition and reinforcement of certain over tones developed in the mouth and pharynx. In reality, the laryngeal sound has nothing to do with the vowel sound, as the latter are clearly differentiated in whispering when the larynx is not in use, and even after the removal of the larynx altogether, as for cancer. Again, the vowel sounds altogether number about 18, some of which are and some of which are not found in English and none of which is clearly indicated by letters in English, without arbitrary diacritic marks. Konig is quoted as ascribing certain vibratory values to the different vowel sounds but it should be stated whether the letters a, e, i, o, u, represent the German sounds or not. I, as pronounced in English certainly does not correspond to 3760 vibrations or any other single number, since it is a diphthong. The consonants likewise are very inadequately discussed.

A PRACTICAL TEXT BOOK OF THE DISEASES OF WOMEN, by Arthur N. H. Lewers, M. D., F. R. C. P., London, published by Paul B. Hoeber, New York. 540 pages, 258 illustrations in the text and 18 plates. 7th edition, \$4.00.

Hoeber's books are of the highest standard of print and paper and he has a reputation for securing authors of practical

ability. There is not much opportunity for divergence in a text book on a standard subject and no attempt has been made at an artificial appearance of originality by sacrificing the natural arrangement. We can say little, therefore except in general terms of commendation.

PHARMACOLOGY, by Maurice Vejux Tyrode, M. D., published by P. Blakiston's Son & Co., Philadelphia, 2d edition, 288 pages, \$1.50.

After a general consideration of definitions and principles, the author divides drugs into those whose constitutional action is in greater prominence, ferments, secretions and extracts of animal organs, drugs whose local action is more in evidence and drugs of inorganic origin. Groups are named after typic drugs, as "Group of amyl nitrite," so far as possible. In the present state of science, this plan impresses us as most sensible. The book was evidently prepared for use by his classes at Harvard but deserves attention by the graduate as well.

FURTHER RESEARCHES INTO INDUCED CELL REPRODUCTION AND CANCER, by H. C. Ross, J. W. Cropper and E. H. Ross. Published by John Murray, London, as part of the McFadden Researches. 125 pages, illustrated in color, \$1.00 (Vol. II.)

As was the case with Volume I, these papers deal with controversial problems and, while of inestimable value to the special student, lack the completeness, systematic arrangement and, let us say, dogmatism, demanded by the ordinary reader.

N. Y. STATE MUSEUM BULLETIN No. 158 (April 1, 1912), . .

This issue, while theoretically the fortnightly bulletin, is an elaborate report of the Director, Prof. John M. Clarke, and of his co-workers in the fields of archaeology, geology, etc. The salvage and loss in the burning of the State Capitol, are reported in detail and, fortunately, illustrations and descriptions of certain lost specimens, are extant.

BUREAU OF AMERICAN ETHNOLOGY, Bulletin No. 52, Early Man in South America. By Ales Hrdlicka, Curator of the Division of Physical Anthropology, U. S. National Museum, in collaboration with W. H. Holmes, Bailey Willis, Fred. Eugene Wright and Clarence N. Fenner.

This Bulletin includes a thorough study of various discoveries by many explorers, and of a personal exploration in 1910, the principal issue being the antiquity of man in the New World. Without entering into details nor attempting to review the multitude of highly interesting scientific observations made along many lines, the general conclusion may be stated that in South America, as in North America, no indisputable nor even probable evidence exists of anything approaching geologic nor archaeologic

antiquity. In other words, the expression "New World" is scientifically accurate so far as the Human race is concerned.

A TREATISE ON DISEASES OF THE HAIR, by George Thomas Jackson, M. D., Professor of Dermatology in the College of Physicians and Surgeons, Medical Department of Columbia University, and Charles Wood McMurtry, M. D., Instructor in Dermatology in the College of Physicians and Surgeons, Medical Department of Columbia University, New York. Octavo, 366 pages, with 109 engravings and 10 colored plates. Cloth, \$3.75, net. Lea & Febiger, Philadelphia and New York, 1912.

There is no better illustration of the development of a true scientific spirit in the profession than a work of this sort, dealing systematically with structures formerly considered "infra dig." And, when we consider the mortification and, especially among women, the really serious social and economic handicap entailed by loss or deterioration of the hair, it is quite proper to include the practical clinical and therapeutic portions of the book with the humanitarian value of treatises dealing with other parts of the body. A preliminary section deals with the anatomy (including histology) and physiology, (including hygiene) of the hair and related dermal organs. We would suggest that the discussion of types of hair might well be extended so as to include racial differences.

A MANUAL OF CHEMISTRY.—A guide to Lectures and Laboratory Work for Beginners in Chemistry. A textbook specially adapted for students of medicine, pharmacy and dentistry, by W. Simon, Ph. D., M. D., Professor of Chemistry in the College of Physicians and Surgeons, Baltimore, and in the Baltimore College of Dental Surgery; Emeritus Professor in the Maryland College of Pharmacy; and Daniel Base, Ph. D., Professor of Chemistry in the University of Maryland. New (10th) edition, enlarged and thoroughly revised. Octavo, 774 pages, with 82 engravings and 9 colored plates, illustrating 64 of the most important chemical tests. Cloth, \$3.00, net. Lea & Febiger, Philadelphia and New York, 1912.

The work is divided into sections on Chemical Physics, Principles of Chemistry, Non-Metals, Metals, Analytical Chemistry, Organic Chemistry, Physiological Chemistry. It is further divided into sections like short chapters. The depth to which the various topics are probed, is well adapted to the requirements of the medical student and physician but tables for reference, tabular groupings and typographic indications of relations of subdivisions to larger units of thought, so useful in aiding the beginner to grasp a subject, are not employed to the extent desirable and now common. For instance, we find no complete list of atomic weights, valence, specific gravity, specific heat, and the only full list of elements is divided into three groups according to their "great and general interest," "special use made

of them," and their lack of anything but scientific interest, without any reference to their properties or relations. The modern tendency to revive, in modified form, the ancient conception of transmutability is ignored, as is the very plausible theory of the origin of natural gas independent of plant and animal remains. It would be the height of injustice to leave the impression that the book is unsystematic. The style is lucid, even entertaining and general principles are thoroughly taught in spite of the lack of detail so desirable for reference in tables. If edited by one with a genius for arrangement to afford bird's-eye views, the book would be ideal.

THE PRACTITIONER'S ENCYCLOPEDIA OF MEDICINE AND SURGERY, in all their branches. Edited by J. Keogh Murphy, M. C., F. R. C. S., London, published by the Oxford University Press. 1423 pages, illustrated, cloth, \$7.00, half leather, \$8.00.

This is a truly elegant volume, systematically arranged under general divisions of Medicine, Surgery and various special branches. The alphabetic index facilitates reference. Of course, no single volume can literally fulfill the implication of the title. Foster's Encyclopaedia, for example, over 20 years ago, devoted 5 volumes to the endeavor, each of them with more pages and in much finer print than this. But the abandonment of the alphabetic arrangement of separate articles, each disappointingly brief and incomplete, has made possible a presentation of practical medical knowledge, mainly of a clinical nature, in an orderly way and to an extent that would seem impossible. Good judgment has been shown in gauging the discussion of laboratory tests, etc., to the equipment of the practitioner. Moreover, as there never can be an absolutely complete and stable encyclopaedia of a rapidly progressing science, it is wise to put reasonable limits to the scope and the cost of any work of this nature. In some respects, for example the treatment of medico-legal problems, the requirements of the non-British reader are not and could not have been fulfilled. Such statements as that the amount of sugar in diabetes may reach 12,000 grains would also be more intelligible to the American and, a fortiori, to the continental European reader, if expressed in metric units.

THE PRINCIPLES OF HUMAN PHYSIOLOGY, by Ernest Henry Starling, M. D., (London), F. R. C. P., F. R. S., Lodrell, Professor of Physiology in University College, London. Octavo, 1423 pages, with 564 illustrations, some in color. Cloth, \$5.00, net. Lea & Febiger, Philadelphia and New York, 1912.

This is the kind of book in which one finds not only the expected but the unexpected. It might be called a quantitative

physiology, in contrast to the ordinary qualitative text book. The chemistry of the body is carried back to the lightning flash which combines atmospheric nitrogen into ammonium nitrite and the synthesis of nitrogen is carried through the action of symbiotic bacteria of vegetable roots into animal chemistry. When a subject is mentioned, as ferments, calories, proteids, etc., complete lists are given. The work is quantitative not only in presenting numbers, as of percentage composition, amounts of excretory principles amounts of substances digested, etc., but in the free use of algebraic formulae, and, under the discussion of the eye, of trigonometry. Through the index, the reader can find much information for which he has been seeking in vain and we confess personally to have come upon several delightfully interesting topics of whose very existence we were ignorant. Yet the book is by no means difficult reading; its very thoroughness brings together blind passages and one subject is elucidated by being brought into relation with another. We would not give the impression that the work consists merely of statistics of physiologic chemistry and physics. It is a genuine physiology, incorporating much recent discovery regarding immunization, the ductless glands, gastric, faecal, urinary blood and other objects of laboratory investigation whose relation physiology we have scarcely appreciated.

PHARMACOLOGY AND THERAPEUTICS, H. C. Wood, Jr., M. D., Philadelphia, published by the J. B. Lippincott Co., Philadelphia, 429 pages, \$4.00.

Dr. Wood is both fortunate and unfortunate in the fact that his family has been so active in the study of drugs for nearly a century. An inspection of his book convinces one that while he may properly benefit by the association of Wood with drugs, in the professional mind, he has put into it a proper degree of original investigation and study. The work itself follows the customary pharmacologic arrangement, is systematic and thorough.

PATHOLOGY AND TREATMENT OF DISEASES OF WOMEN, 4th edition, by A. Martin and Ph. Jung of Greifswald, Germany, only authorized English translation by Henry Semitz, M. D., Chicago. Published by the Rebman Co., N. Y. 475 pages, 187 illustrations, 25 in colors, cloth, \$5.00.

This is a systematic treatise of the highest order, brought out with the highest grade of skill in the mechanic preparation of the book. We venture to suggest, however, that the translation, though grammatic retains too many German idioms.

PROGRESSIVE MEDICINE, edited by Hobart A. Hare, M. D., and Leighton F. Appleton, M. D., Vol. 14, No. 3, September, 1912. Published by Lea & Febiger, Philadelphia and New York. Quarterly, \$6.00 per annum.

This issue deals with the Thorax, Dermatology and Syphilis, Obstetrics, Nervous System. The respective contributors are Edward P. Davis, Wm. Ewart, Wm. S. Gottheil and Wm. G. Spiller. The usual standard of excellence is maintained, indeed the present contributors have realized better than some have done in the past, that their function was to review medical literature rather than present personal views and experience.

CLINICAL BACTERIOLOGY AND HAEMATOLOGY FOR PRACTITIONERS, by W. D'Este Emery, M. D., B. Sc., London, published by P. Blakiston's Son & Co., Philadelphia. 4th edition, 274 pages, 50 illustrations, some in colors, \$2.00.

A very convenient plan is followed of stating for each disease, the apparatus and stains necessary and, after a detailed description of technic, is given a practical note on "interpretation of results." Vaccine and analogous methods of treatment are mentioned, whenever applicable.

CONSUMPTION IN GENERAL PRACTICE, by H. Hyslop Thomson, M. D., D. P. H., Medical Superintendent of Liverpool Sanatorium, Oxford University Press, 335 pages, illustrated, \$5.50.

The disease is considered under three general headings, Diagnosis, Prognosis and Treatment. Under each, the various problems are systematically grouped in chapters and we are impressed with the fact that the author has omitted nothing new and neglected nothing old. Certain administrative differences in the sanatoria of England and the U. S. are of special interest, particularly as they denote no essential difference of professional opinion.

MUSCLE SPASM AND DEGENERATION IN INTRATHORACIC INFLAMMATIONS, their importance as diagnostic aids and their influence in producing and altering the well established physical signs, also a consideration of their part in the causation of changes in the bony thorax. And LIGHT TOUCH PALPATION, the possibility and practicability of delimiting normal organs and diagnosing diseased conditions within the chest and abdomen by very light touch. Francis Marion Pottenger, A. M., M. D., LL. D., Monrovia, Calif. Published by the C. V. Mosby Co., St. Louis. 105 pages, 16 illustrations, \$2.00.

This is a typic Mosby book, unclassifiable, with no respect for longitude in the selection of an author, lacking a background of a row of conventional books on the same subject with which it

may be compared. It represents three years of original observation on a large number of clinical cases, carefully controlled by a study of the work of other authors not along the same lines, but of such a nature as to afford data bearing upon the correctness of the author's conclusions. It puts new tools into the hand of the diagnostician and, obviously, he must learn to handle them before he can judge of their usefulness. Many probably can never learn to use them—any more than they have been able to use auscultatory percussion, for example.

THE SURGERY OF THE RECTUM FOR PRACTITIONERS, by Sir Frederick Wallis, M. B., B. C., F. R. C. S., London, published by the Oxford University Press, 355 pages, 129 illustrations, \$5.50.

While the work is essentially surgical, full attention is given to clinical details and the work is not surgical in the narrow sense of dealing only with operations. Colitis and sigmoiditis and the extension of venereal diseases are also considered. It is rather a relief to note the absence of of X-ray plates.

PRACTICAL ANATOMY, from the Topographic Standpoint and a guide to dissection. John C. Heisler, M. D., Philadelphia. 366 illustrations, 225 in color by E. F. Faber. 790 pages including a thorough hindex. Limp leather, \$4.50. Published by J. B. Lippincott, Philadelphia.

From the fact that this book comes in a package bearing the advice that the medical student should get another anatomy, we infer that the present book is intended only as a dissecting and operating manual. The arrangement, too, is by regions instead of following the anatomic systems and apparatuses. Yet the text is full and, as under the description of certain articulations, even the physiology of movement is well discussed. In other words, while not intended to supplant the systematic works on anatomy, it is considerably more than a perfunctory regional treatise.

A MANUAL OF PHARMACY FOR PHYSICIANS, M. F. DeLorme, M. D., Ph. G., L. I. College Hospital, New York. 3d edition, cloth 221 pages, 19 illustrations, \$1.25. P. Blakiston's Son & Co., Philadelphia.

This book follows the natural arrangement, discussing the general principles first and then the various official preparations by Galenical terms. We would suggest that there is no use writing a metric prescription which is merely thought out in apothecaries' terms and transposed. The table of Latin words used in prescriptions is complete and should obviate many of the mistakes made through ignorance or carelessness.

MEDICAL DIRECTORY OF NEW YORK, NEW JERSEY AND CONNECTICUT, 1912.

This book, compiled by the State Society, credited for the actual work being modestly withheld, appears in the customary form. The following comparative statistics may be interesting:

	1910	1911	1912
Connecticut	1384	1401	1394
New Jersey	2558	2582	2674
New York State	13474	13641	13696
Greater New York City	7169	7249	7365
Up-state	6305	6392	6331

These statistics are encouraging as indicating that we have reached a point at which the economic evil of professional oversupply will probably tend to be corrected by natural causes.

The JOURNAL will gladly serve as a bureau for revision of the Directory, for western New York. Glancing through the Buffalo list, we find the names of five physicians who moved away, a year or two ago. It should also be realized that the list—presumably for the entire scope of the directory—includes those licensed to practice. On the one hand, it omits the large number of irregular practitioners who may or may not be considered as competitors. On the whole, our personal experience is that such practitioners rather increase than decrease the work of the regular physician (using the word regular in a broad sense, for the directory is based on legal not ethical status). On the other hand, a considerable number of retired physicians and those engaged in teaching, clerical work, manufacturing, etc., are included. In 1911, the Buffalo list numbered 667, 22 of whom could be immediately excluded on account of death, non-residence, retirement, etc. The list of 1912 numbers 703, 27 of whom may be immediately excluded, besides several married women physicians not in active practice. 4 names should be added.

SULZER'S SHORT SPEECHES. J. B. Ogilvie Publishing Co., 57 Rose St., New York City. 25 cents, paper cover.

We can scarcely review this book without entering a field which a medical journal should carefully avoid but we may say that the versatility of a man in political life is interesting to a profession trained to avoid matters on which they can not work for years and that, irrespective of political views, the thoughts expressed are of interest to the average reader.

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ORIGINAL ARTICLES

Abnormalities of the Appendix Due to Disease

JOSEPH S. LEWIS.

Buffalo N. Y.

ABNORMAL and curious conditions of the vermiform appendix are of so frequent occurrence that only the most striking and eccentric usually find their way into the literature.

The occurrence of double appendix is so rare as to cast doubt on the few cases reported. Absent appendix can be accounted for on morphologic grounds as well as through the accidents of previous disease. The writer once assisted at an operation where, even after enlargement of the incision and painstaking search, by a careful surgeon, of an otherwise normal caecum, no sign of any appendix was found save a small conical protrusion of the gut where the appendix should have been.

Some two years ago in a notorious book on the troubles and failures of the medical profession there was cited a case since often repeated with gusto by laymen. A surgeon having, as he thought removed the appendix of a certain patient, was chagrined on seeing a colleague later remove an appendix from the same patient. That this story need not reflect on the ability of surgeon No. 1, the following instances will tend to prove. These are not intended as case reports but conditions observed by the writer in his own experience and in his hospital service as interne.

(Fig 1.) This patient had two years previously an appendix abscess which was incised and drained. At the second operation the distal end of the appendix was found attached like a captive dirigible balloon by a thin mesappendix to a short proximal stump under adhesions. This stump need have been only a trifle longer to have made possible a second appendicitis. The writer marvels, that the apparently normal, though somewhat atrophic mucosa within the free portion, had not distended it with secretion as has been shown to occur in an excluded closed loop of gut.

(Fig. 2.) This represents a type in which the proximal end of the appendix lies retrocaecal. The writer has seen a second rate surgeon leave behind the retrocaecal one-third of such an ap-



Fig. 1

pendix through use of the absolute method of simple ligation of the appendix leaving uncovered the cauterized stump. Investigation would have disclosed the base.

(Fig 3.) This patient was operated on in extremis with peritonitis, by a most capable surgeon. At a secondary operation

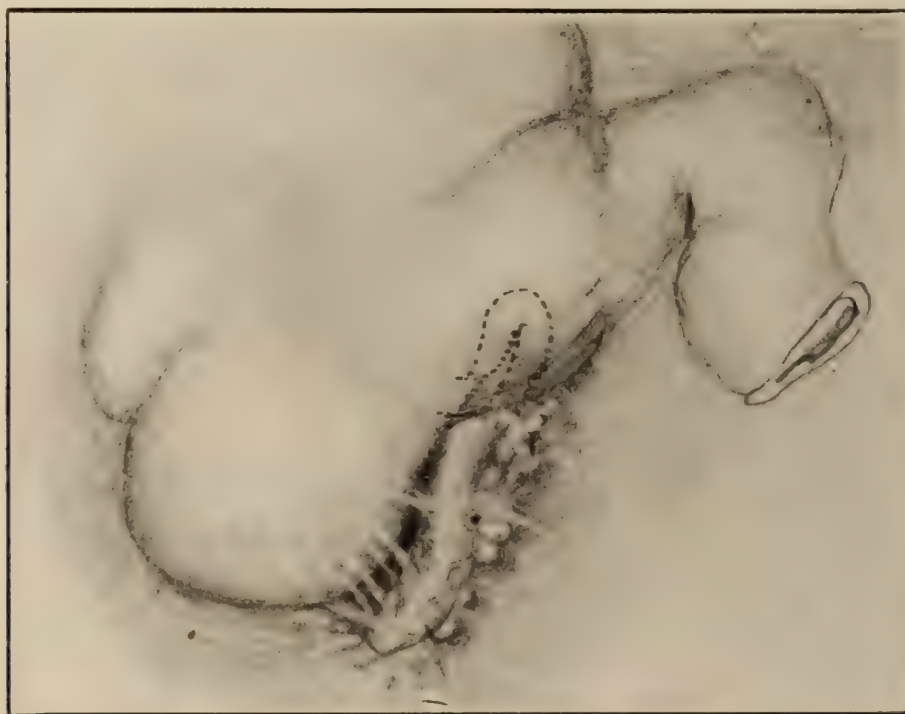


Fig. 2

by the same man for adhesions, remnants of an appendix were removed from dense adhesions. At a third operation for ileo-caecal obstruction the writer found one and one-fourth inches

of appendix distally adherent to the drainage scar in the abdominal wall.

These experiences confirm the value of burial of the appendix stump in the caecal wall and afford an explanation for some cases of apparent but not actual removal of the appendix.

471 Virginia Street.

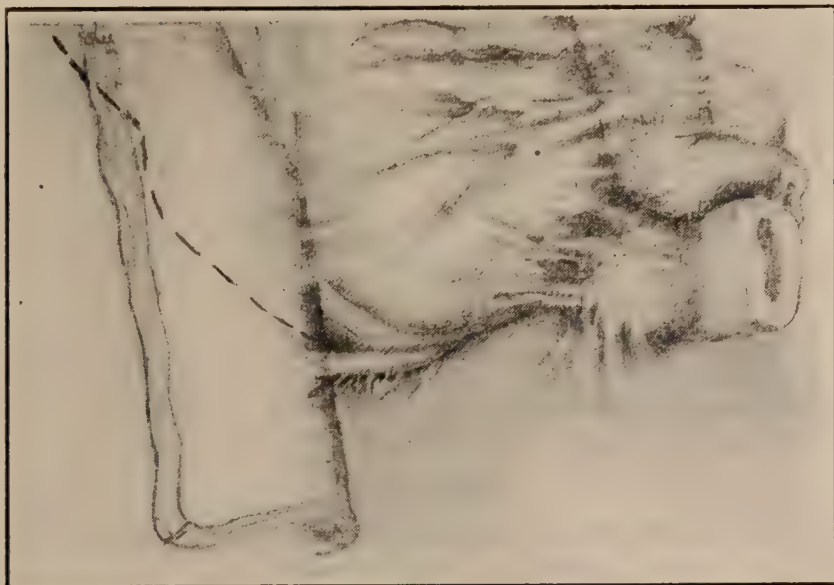


Fig. 3.

Home and Office Treatment of Inebriety

By T. D. CROTHERS, M. D.,
Superintendent Walnut Lodge Hospital,
Hartford, Conn.

WITHIN a comparatively recent period, it has been noted that physicians are called on, with increasing frequency, to treat persons who are intoxicated or suffering from some disorder that has followed the excessive use of spirits.

Often these persons are from the best families and among those who are the warmest patrons of the physician. They are suffering from delusional states, have defects of vision and hearing and other conditions which they realize are the results from spirit drinking, and turn to the physician with pathetic eagerness for help. They are alarmed, mortified and excited and this is increased by the anxiety of relatives and friends.

The physician is often distressed at the impotency of his efforts and is in doubt as to the best methods and means to be used. If he gives opium or its alkaloids, there will be stupor, following delirium, and not unfrequently narcotism with the possibility of fatal termination.

When this occurs his anxiety is increased with the thought that the narcotic was the most active cause. If he tries emetics

and purgatives, unexpected results may follow and he is discredited in the mind of the patient, as well as in his own judgment.

If he tries placebos or remedies laid down in the book, there is the same uncertainty and often failure in most unexpected ways. Later in disgust he tacitly agrees to have the patient try the gold cures or go to some secret quack institution.

Finally the patient returns restored and is buoyed up with the delusional confidence that he is cured, and is emphatic in his praise of the value of these means. The physician is certain that no new remedies are employed; that the managers of these places are not medical men of repute, and scientific attainments, and do not possess anything in the nature of drugs with which other physicians are not familiar.

Now when members of old families who have been devoted friends obtain relief from such doubtful sources and by secret means, promoted by charlatan methods, a feeling of deep regret pervades the physician's mind, that he could not have done as much with his knowledge and training. This is the common experience of every general practitioner.

Another fact is growing more and more apparent, namely the failure of clergymen, philanthropists and reformers to render aid to these poor unfortunates; also the harshness of legal methods by fines and imprisonments. Clearly the physical side of the subject is unrecognized and as a result the conditions are intensified and the persons are made more and more incurable.

The possibility of a practical home treatment is a reality to a far greater extent and is becoming practically recognized in various ways. Thus in the large cities, hotels find it practical to employ physicians, their principal work being to treat persons in the acute stage of intoxication.

The early practice of physicians brings them in contact with these cases more than ever. They are sent for on the supposition that they possess more acute knowledge of the conditions, and that their personal knowledge of the patient will enable them to confine their attentions to the present conditions.

The older physicians often retain the old time prejudices and theories that these sufferers from drink excess are moral weaklings, that they are simply reckless and should suffer, that they need moral reprimands and appeals to that side, rather than drugs and physical measures.

It is this attitude that has driven patients away to the charlatan homes who could and should have been treated by the family physician.

Some of the facts which are not clearly understood may be grouped as follows. A person, stuporous or delirious with an alcoholic breath and a history of having used spirits to great excess is suffering from a serious pathological condition. While alcohol may have been the exciting cause, there may be present numerous complications such as blows on the head, sun strokes, or some sudden mental shock, disturbing and paralyzing the functional activities of the brain, which are exciting and contributing causes.

A man who is drinking at intervals receives a severe injury and very soon afterwards he becomes intoxicated, manifests strange symptoms. Evidently the alcohol is not the chief cause. Intoxication is always a pathological toxemia, palsy, congestion of certain brain centers, also a culmination of continued shocks from toxemias and cumulative organic degenerations with spasmodic alterations of nerve energy. These acute symptoms may pass away, but the injury which follows from them is not removed or repaired at once.

A very curious question was asked in a certain circle, viz: How often could a person become intoxicated, meaning stupid or delirious from the effects of spirits and apparently recover? One author claimed that he had noted several hundred attacks of this kind in different persons. Another claimed it possible to have a much larger number of toxemias.

In my experience I think from sixty to one hundred times is about the limit, and in most cases long before this, permanent alterations begin and the person is insane and demented or dies from some acute disease. Not unfrequently the drinking man has long periods of sobriety between the drink excesses. During this time a certain degree of restoration takes place, hence he might live a great many years and be intoxicated at long intervals, but it is certain that a man who drinks to the toxic stage frequently, dies early or becomes insane.

The first question in the practical treatment of such persons is to determine whether the person is a chronic drinker, that is one who has drank for years even in so-called moderation, or occasionally to excess? Is the patient a periodic drinker with periods of distinct abstinence? Is he a continuous drinker, taking wine at the table or beer at short intervals? If a periodic drinker the tendency of the case is to recover. The paroxysm dies out and the desire for spirits disappears, and the treatment required is to encourage this condition as far as possible and not complicate it or retard the progress.

If the person is a continuous drinker a very complex condition of poisoning exists. General degenerations and pervers-

sions of all the functions are present. Toxins from without and within are present and the most careful studious examination must be made.

Some acute conditions or some symptoms out of the ordinary appear before the physician is called and it is safe to assume that the conditions are far more serious than they appear on the surface. The person is maniacal and delusional or stupid and demented to some degree, often not apparent to casual observation. If the person is a periodic drinker and the usual time of drinking is nearly ended, powerful elimination may be resorted to. If gastritis is not present large doses of ipecac may be given or apomorphia, particularly if the patient has been insomniac for some time. If the bowels have been constipated, a drastic cathartic, such as croton oil has a very good effect. The three days quack treatment, depends entirely on elimination by the bowels, vomiting and profuse diaphoretic action. This continued vigorously for 24 hours or 48 hours, associated with hot baths, eliminates the toxins and is such a severe drain on the system as to change the activities of the entire organism. This is rational treatment for a certain number of cases. The charlatan application is used in every case indiscriminately up to the point of profound collapse, and associating with it suggestion and the dominance of an idea that he can never drink again and is thoroughly cured.

Hot baths and fomentations over the body are the safest and most effective measures to produce eliminations of the toxins. In one of the stories of Dickens a large number of voters were so much intoxicated as to be unable to exercise that function. They were taken to the town pump and after being thoroughly drenched with water, recovered or were made sober by it, and then were able to cast their ballots. This was a very good practice.

All institutions that give scientific treatment for these toxic cases, find water in the form of either hot or cold douches or packs a most valuable measure. This can be substituted in private homes by vigorous rubbings and hot applications. If the patient is in a delirious condition and resents all efforts to do anything for him apomorphia by the needle in $1/10$ of a grain doses is the most powerful relaxant which can be used.

Sometimes extreme nausea follows, and usually narcotism. Smaller doses of from $1/30$ to $1/50$ of a grain, given at intervals of two or three hours, change the tension of the mind and body and unless there is some organic disease of the heart or arteries, the results are very satisfactory. If the case is simply stuporous, tincture of ipecac will be a simpler eliminative; that and salines

would be less likely to be followed by any drug effects. Morphine and chloral are dangerous. The later always increases the delirium for a time before its anaesthetic effect is produced. If the patient is an alcoholic, the chloral is dangerous, because the drug being one of the alcohols may act on the vital centers lowering them beyond the point of recovery or at all events produce additional disturbances of irritation and congestion.

The morphia is also uncertain because of the possible unknown narcotic action. Eighth and quarter grains are sometimes stimulating, and then suddenly center in pronounced depressive states.

In private practice it is always unsafe to give narcotics without some personal knowledge of the patient, particularly of the conditions present. Morphia may act as an additional toxaemic, checking elimination and indirectly intensifying the very condition which it is supposed to remove. When given it should be very carefully watched, until its possible effects are beyond question.

Not unfrequently sudden death takes place in a person intoxicated who has been given a dose of morphia. A man at a banquet became profoundly intoxicated; was taken into a side room in a state of muttering delirium and after a quarter of a grain of morphia, died. There was no question but the morphia precipitated the final condition.

Apomorphia is far safer, although equally powerful, because of its irritant effects. A continuous drinker awoke one night with hemiplegia. The physician increased the dose of spirits with an addition of strychnine and morphia. The man died in a short time. Sharp eliminatives, cathartics and removal of the spirits would have taken away the active exciting causes and given the man a better chance to recover.

The treatment of acute conditions in home and office practice calls for subsidence or relief from the positive toxemic conditions present. Thus acute gastritis may be relieved by stomach lavage with hot and cold water fomentations on the outside and along the spine, combined with rest and the correction of acid or alkaline conditions.

A very foolish theory that spirits will relieve this condition if combined with eggs and milk, also other substances is still urged. Chronic inebriates often treat themselves by increased or reduced doses of spirits or wines, beers and other alcohols, and claim great results from them. The delusional theory that alcohol is a stimulant, based on the fact that it raises the heart's action, explains many of the difficulties of the treatment of such persons.

The apparent stimulant action is simply an irritant, followed by depression which quickly lowers all the functional activities of the organs to the narcotic stage. Hence the man suffering from the effects of alcohol is depressed, and anaesthetized. He may have been suffering from auto intoxications and metabolic changes of nutrition, before spirits were used. Then alcohol adds additional anaesthesia and depression.

The man who becomes profoundly intoxicated at the banquet is suffering from several states of poison. The alcohol has lowered the nutritional activities and diminished the heart's capacity to propel the blood. Foods and fluids are fermenting and dilating the stomach, and this is pressing on the heart, still further diminishing its power. There is vasomotor paralysis, defective oxidization, accumulation of salts, acids of toxins, with a tendency to localized spasms in the brain centers.

Elimination from the stomach, bowels and through the skin by the simplest methods and means is called for. What damage is done to the neuronie centers and how far the heart will react is unknown. The subsidence of the acute symptoms may reveal other grave conditions, demanding immediate attention.

In the person who has drunk continuously in so-called moderation and seldom seemed to show the effect of spirits, there are always defective nutrition, depressed vitality and localized inflammatory conditions, following congestion and the corroding effects of alcohol.

His own estimation of his condition should never be relied upon. Many persons of this character who have used spirits for years in some form or other complain of what is called rheumatism which is literally neuritis, and also of stomach troubles. They have congested faces which must be recognized as an indication of the circulation of blood vessels of the brain.

Obscure symptoms that point to grave organic degenerations, not unfrequently conceal the real cause and prevent the use of active measures that would otherwise be used. Insomnia, muscular trembling and palsy, local or general appear. Persons of this character go to specialists in the large cities and after most elaborate diagnosis and treatment, fail to secure any benefit.

If the specialist or physician uses spirits personally, he will underrate the effects of alcohol, most naturally, and often overlook its influence as a factor in the case under treatment. Many illustrations of this are seen. Thus a very good physician of this class failed in his treatment of a family that was accustomed to use wine and spirits both as a medicine and at the table as a beverage.

A younger physician insisted on spirits being withdrawn, and impressed his views on the family so sharply that he superseded the older one.

In the home and office treatment all cases that are complex with any kind of a history of the use of alcohol should be regarded as possibly due to alcohol, and total abstinence should be the first step. Then remedies addressed to elimination and correction of possible toxemic states should be used.

In alcoholic delirium and exalted states apparently due to spirits hydrtherapeutic measures are the safest. Muscular delirium can often be treated by an opportunity of working it off in the open air. In a case of delirium tremens I was called to see, a powerful man was strapped down on a bed. He was struggling severely. He was removed and sent out walking between two men, and in the course of half an hour he returned, exhausted and made a good recovery.

Apomorphia was given him in very small doses and this broke up his delusional condition. In another case of delirium all drugs were removed and the patient was placed in a warm bath and kept there for two hours. Then relaxation took place. It is much safer to treat cases of delirium by hydrtherapeutic measures and free exercise with the necessary eliminatives than by narcotics. The old time methods of a straight jacket with restraint, should be avoided, unless absolutely necessary.

There are always a certain number of persons who while having delirium and delusions are considered dangerous. They should be sent to an institution or placed under the care of persons who are familiar with this class of disorders. Not unfrequently persons in this unsettled mental state come under my care, and on recovery go back to the physician and are treated with great success. There is no thought of final cure or claims of new remedies with new effects, but simply states of disease that require removal. The family physician of all others is the best fitted to give the after care and treatment.

Often such persons are narcotized by the physician and develop very grave symptoms, suggesting some form of insanity. They come under my care and are practically drug victims, suffering from bad treatment on a starved and poisoned organism. There is so much sentiment and so many mistaken theories and deceptive efforts to conceal the real cause that the physician is often very seriously prevented from doing what his own judgment would suggest.

Frequently gormandizing and irregularities of living precede and follow the use of spirits and complicate the conditions so seriously that institutional treatment is required. Here the pa-

tient can be restored to a normal condition and in a measure taught how to live after, and then with the help of the family physician make a good recovery.

There is something very absurd in the statement that persons who have drunk to excess can in four weeks recover permanently by any form of treatment. Their statements of final restoration and cure can only be verified after a long period of years.

If after a short treatment in institutions they could go back under the care of the physician and retain him as a permanent adviser and counsellor and consult him often, there would be much promise for the future.

The best experience covering a period of nearly forty years in the active care of these persons, fully confirms this. Like the tuberculosis cases, a few months residence in a sanatorium gives them strength and capacity to overcome the disease and with it a knowledge of how to continue the treatment. Then the care of the family physician added to this makes the permanence of restoration very pronounced.

The office treatment of inebriates is unsatisfactory and often very annoying in the opinion of many physicians. Doctors having extensive practice, especially in large towns and cities are frequently consulted by persons under the influence of spirits. It is a problem what to do for them. A physician in Worcester prescribed a quarter of a grain of morphia and the man was found dead a few hours later. In another instance chloral was prescribed. The man went to a saloon, drank more and committed a homicide.

There is so much uncertainty and actual peril in office treatment of persons of this class that many physicians refuse advice or give medicines under these circumstances. I have found a concentrated solution of quassia to be the most effective of all the remedies. An infusion of quassia boiled down once or twice to obtain double the strength may be given to a drinking man with strict injunctions to use a half an ounce every two hours, through the day. He is told that he may drink as usual, but under no circumstances must he neglect to use the medicine. In a very short time a species of quassia poisoning comes on, and all forms of spirits become intensely disgusting and really repelling.

The patient's mind is startled and pleased to think that he can't drink spirits and while the quassia is very unpleasant, he continues its use. The thought grows on his mind that he probably can never drink spirits again, and he returns to the physician with the deepest gratitude.

This is the opportunity for the physician to get possession of him and begin a course of treatment that in many cases brings about final restoration. Cinchona bark will do the same thing and was some years ago exploited as a specific remedy, but quassia is simpler and seems not to complicate any of the function of the body, other than to irritate the stomach, provoking an increased appetite.

An illustrative case is worthy of note. In a Massachusetts town a delirious haggard-looking man appealed to a doctor to help him, saying he had drunk for days and was in the deepest despair. He had called on other physicians and been turned away. Some of them gave him money to procure more spirits, others treated him harshly. He declared he wanted to stop the use of spirits, that he was literally crazy and had that morning tried to kill his wife and himself, and end his existence.

The doctor gave him a large dose of apomorphia and sent him out to the stable under the care of the hostler. He vomited freely and went to sleep. A few hours afterwards he awoke and was given another dose. This relaxed him still more. Then he was given a warm shower and a large dose of quassia. This was kept up for nearly two days in the stable, then the man was sent home.

He returned to the physician every day taking quassia, together with other tonics and made a very good recovery. Eventually he became a wealthy man, and was one of the warmest friends of the physician. This showed the possibility of practical treatment. In periodic drinkers the return of the paroxysm is often predicted by the patient and his family in certain erratic symptoms of conduct and thought.

The physician is appealed to, to prevent the paroxysm. Each case is a problem of itself. Not unfrequently morphia is given and the paroxysm is broken up, but the patient discovers a means which he will use on future occasions with the danger of a morphine addiction. It should be remembered that all these drink neurotic cases turn very quickly to drug addictions and, hence narcotic drugs should be used with great care and secrecy.

A safe combination which can be used on the approach of the drink paroxysm is nitrate of strychnine and sulphate of atropia, $1/60$ of the former to $1/100$ of the later. This can be given every three hours. If with this, calomel purgatives are given and baths, often the paroxysm may be averted.

Many persons find this combination a very satisfactory one and unless there is some peculiar sensitiveness to these drugs, it can be continued for some time. Both atropia and strychn-

nine are the basis for all the gold cures, with additions of drugs, which are of less value.

In a moderate drinker, after the subsidence of the drink craze, a combination of this kind with 1/200 of a grain of atropia may be given three or four times a day, and should any signs of poisoning appear, it should be stopped for a week or two, and then resumed in smaller doses.

Phosphate of soda is another remedy which in certain cases, particularly where there is a tendency to acidemia, is followed by the very best effects. In many of the spirit neurotics, insomnia is a frequent after symptom. Sometimes this is successfully treated by baths, but where these are not available, some of the mild narcotics can be used, namely lupulin or hops. I find that the ordinary infusion of hops acts well. The preparations on the market are frequently old and inert. Valerian is another excellent remedy. As a tincture it is not always safe. There is alcohol enough in it to keep up an irritation which will sometimes break out in the drink paroxysm.

Bromides may be used, particularly bromide of sodium. The insomnia often passes away and is followed by nutrient disturbances and debility, frequent exhaustion and nervousness. These require special remedies to be given for short periods, and always with the understanding that the patient is supersensitive to narcotic drugs, and may become a drug taker.

States of what are called neurasthenia and psychasthenia follow after spirits have been abandoned, and the family physician who may know of the previous addiction should never minimize symptoms of this kind. Persons who come for treatment of these complex nerve troubles, together with nutrient disturbances, who give a history of having used spirits at some previous time require great discretion and judgment, with careful prognosis.

They resemble the obscure symptoms that frequently follow, years afterwards in cases of syphilis which disappear after mercurial treatment. These symptoms give way readily to eliminative measures and certain bitter compounds like the strychnine and atropia or certain mild narcotics. In the opinion of many physicians, phosphate of soda is a remedy of the greatest value. At all events it can be used with safety.

Cirrhosis is a very common condition following the use of spirits. The high tension arterial measurements indicate its presence and its organic character is assured by the persistency of these symptoms. The iodides may be given for this condition, and arsenic preparations. All such patients should be impressed

with the necessity of frequent consultation and the great difficulty of permanent help.

A large proportion of the cerebral hemorrhages can be traced to alcohol and cirrhotic arteries. The specific action of alcohol paralyzing the vaso-motor nerves and producing excessive fibrous deposits in the system, and about the arteries provokes hemorrhage. The physician by wise counsel may prevent this condition and greatly lengthen life.

The moderate and excessive drinker have low vitality and feeble resisting powers and pneumonia and Bright's disease are likely to come on any time. There are preventable conditions in every case which can be seen and overcome and their physical character should be recognized. In the periodic drinker, the family physician can do a great deal to prevent the paroxysm by removing causes and correcting abuses. This with psychical and mental treatment succeeds.

The drink attacks resemble epilepsies and can be treated at home. Often institutional treatment is necessary to break up the mental impressions and secure the fullest co-operation of the patient. Then home treatment can be carried on successfully. Other classes of drinking men are anaemic, hyperanaemic, insomniac and suffer from causes which can be corrected and removed, and it is these conditions which the family physician should study.

I am confirmed in the statement that fully 2/3 of all the drinking men in the country should come under medical care and be studied the same as if suffering from any other disease.

The person who at intervals drinks to stupor, distressing his family and destroying himself is a paroxysmal neurotic, clearly is amenable to medical treatment.

He must first be educated to seek health. His family must join him and a physician must know how to give home treatment that will be effective and this treatment must be continued until these paroxysms pass away. This new field of practice must be occupied by the physician to the exclusion of the quack.

The pauper inebriate must come under the same system and be considered diseased, and if incurable housed in hospitals and made to contribute to his own support. There is abundant evidence that these are practical facts, which are calling for a larger and more intelligent recognition of conditions that are now invested in traditions, stupid theories and absolute delusions.

Every spirit and drug neurotic can be restored—many of them permanently by the intelligent co-operation of the family and hospital physician, carried on for a period of years. The

physician should study such cases individually and determine how far he can personally treat men with success, and when they should go to hospitals for more exact care and study.

The hospital physician can then send them back for home treatment with a more certain promise of cure, or if the prognosis is bad, permanent hospital restraint in work house hospitals will be called for.

The success of home and office treatment of inebriety is the most promising field of practice and every year my experience confirms the possibility of permanent cures in an increasing number of persons. In all probability the number of neurotics of this class is increasing and the field for their successful treatment is as yet largely unoccupied.

**Dr. E. G. Munn, the Rochester Ophthalmologist, As One of
the Earliest Specialists in America; Together with
the Present-day Rochester Ideas on Specialism
and Medico-Legal Expert Testimony**

By DR. C. W. HENNINGTON
Rochester, N. Y.

DR. Edwin George Munn was born in Munson, Mass., in 1804, either on April 7th or May 8th. He sprang from early colonial ancestry. While he was still a child, the family removed to LeRoy, N. Y., where he grew up. Having completed his literary education, he began the study of medicine with Dr. Stephen O. Almy of that place. Later he went to Fairfield and to Philadelphia to complete his medical study.

Dr. Munn early became interested in diseases of the eye, in fact while he was still with Dr. Almy, and in this manner, as used to be related by our late Dr. Edward Mott Moore. It seems that there were many cases of sore eyes in that new country at that early time and when Dr. Almy told such persons that he did not know how to help them, they would turn to the young student, our Dr. Munn, and say; "Ed, for God's sake, try to help us," and in this way "Ed" became interested in the eye.

In 1828 Dr. Munn, then twenty-four years old, located in practice in Scottsville, N. Y., and continued his special interest in the eye. He lived in Scottsville only nine years and during this time his reputation spread throughout Western New York. It is astonishing to realize from what distances patients traveled in order to consult him, even during this period of his early residence in Scottsville. A Mr. W. H. Abell, long since dead, who was for many years the President of the Western Elevating Association of Buffalo, used to narrate how he had taken his sister,

a girl of twelve or fifteen years, in a cutter all the way from Fredonia, N. Y., to Scottsville, N. Y., probably fully one hundred and thirty miles distant, hoping that Dr. Munn would be able to restore her sight. She had been born blind, evidently congenital cataract, and later obtained her sight. From her descriptions other details of Dr. Munn's life during this time that she was in his care are known to us. "After practicing a few years in Scottsville," Dr. Edward Mott Moore says, "he found himself overwhelmed with the duties of an oculist," and, "in 1837 he removed to Rochester and gave himself up to the duties of ophthalmology." At the time of his removal to Rochester, Dr. Munn was but thirty-three years old. He practiced in Rochester exactly ten years until his death in 1847 on December 12th, thus having reached the age of only forty-three years. Dr. Moore says: "It is doubtful if, during the ten years of his residence here any other man had so many patients and gathered from as large a territory. As the people generally were poor, much of this great following came from his generous disposition and as long as there was money in his purse he was very apt to pay the board bills of his patients and their passage home after their recovery." At that time there was no one in New York City who knew much about the eye and many persons came from there to Rochester to be treated. From a study of Dr. Munn's entries in his records it appears that patients came from Arkansas, Missouri, Illinois, Michigan, and even some of the southern states to consult him. It is said that at times nearly a hundred people waited at his office. He had purchased a home just outside of Rochester in Gates to which he might retire for rest and seclusion at the end of each day's labor.

It has been difficult to obtain facts that indicate Dr. Munn's exact professional attainments. Dr. Edward Mott Moore, who we consider the Nestor of the profession in our part of the country regarded him as a man of brilliant attainments and great originality. He spoke of his dissecting and experimenting and of a great amount of research work in this new field. Thus we have the truly marvelous history of a short professional life.

A few personal facts might be added. While yet in Scottsville in 1834, Dr. Munn married Aristine Pixley who was considerably younger than he and who still survives at the advanced age of ninety-five years. They had three children, of whom one, the youngest, is Dr. John P. Munn, of New York.

As we study the condition of ophthalmology in the United States in Munn's time, our appreciation of his life is even greater than when it is viewed without the back ground of the period.

When Dr. Munn entered practice in the little Village of Scottsville in 1828 and soon found himself able to devote his efforts to ophthalmology alone, there was probably but one other ophthalmologist in all the United State and that was the celebrated Dr. George Frick (1793-1870) of Baltimore. At that time Dr. Frick was still a young man, though about ten years the senior of Dr. Munn. He had begun six years before, in 1822, to give lectures on diseases of the eye in the Maryland General Hospital and was devoting himself to his specialty, having also published his "Treatise on Diseases of the Eye," in 1823.

To be sure, the first Eye Infirmaries in this country had been started in New London, 1817, New York, 1820, Philadelphia, 1821, Baltimore, 1823, but the men who founded and served at these institutions were general physicians and surgeons who had acquired some special knowledge of ophthalmology. Only a few of these earlier men like Frick could be said to actually devote themselves to that specialty.

In Dr. Roswell Park's History of Medicine we read: "As illustrating how little our present specialties were then separated, it is worth while to remark that Dr. Edward Delafield, who in 1826 was Professor of Obstetrics and Diseases of Women and Children in the College of Physicians and Surgeons, New York, delivered at the same time a special course of lectures upon Diseases of the Eye!"

Dr. George Frick of Baltimore, deserves the title of the first ophthalmologist in the United States. Dr. Munn undoubtedly should be placed next and then in point of time should follow such men as Squier Littell and Isaac Hays. Following them comes Ezra Dyer, George Strawbridge and Elkanah Williams of Cincinnati, who returned from abroad in 1855 with the new ophthalmoscope and of whom it is said: "His specialty was quite an innovation at that time (1855); the operative part of ophthalmology was within the province of the surgeon and the ordinary diseases of the eye were treated by the general practitioner.

It makes us marvel that this achievement of Munn's was not more greatly appreciated and that historical articles and books fail to mention him. It has remained for us to fix his claim as a contemporary of the justly esteemed George Frick, and undoubtedly the second ophthalmologist in America.

Thus a man who deserves national fame has failed to receive suitable recognition even by his own community. He was honored and esteemed, but not to the degree that we now realize should have been his. We have another illustration of the ancient adage of the prophet without honor in his own country. It is a psychologic fact that it is difficult to estimate either the man

or the idea that is near to us. We fail to get the proper perspective. Probably Dr. Munn himself also failed to value his life at its true worth.

With this text I wish to bring to your attention the Rochester idea of specialism and medico-legal expert testimony. We are proud that it should be called the Rochester idea for to Dr. Seelye W. Little belongs the credit of originating and advocating this innovation and of putting it to an actual test during his present term as President of our County Society. It would be unfortunate indeed if, because of lack of appreciation of the full significance of this movement, we failed to develop the entire plan as he has repeatedly outlined it. The purpose of this paper is to challenge you to follow out the details of the idea and to make the obvious applications of practical value.

It seems wise at this point to refer to Dr. Little's concise statement in the *BUFFALO MEDICAL JOURNAL* of May, 1912, under the title of "A New Departure in the Medical Expert Matter."

As is well known to us our Monroe County Society at the May, 1912, meeting did adopt a list of thirteen specialists in psychiatry of which seven are members of the staff at the Rochester State Hospital, and six are practicing physicians in the city. This list was sent to every Court and to every Lawyer in the County. Only a half year has elapsed, but the comments and discussion that was provoked proved valuable. The actual result in practice will be watched with much interest.

For the welfare of the profession it would seem desirable to apply the innovation very gradually to the other specialties and only after most careful consideration in each case. The definite specialties such as Ophthalmology, Roentgenology and perhaps some others might be shortly included. Whatever lists are published should be constantly supervised and kept accurate. We might be wise to empower the Board of Censors to officially investigate any charges of alleged unethical conduct on the part of those on these lists.

That this medical expert testimony matter is a subject of very considerable interest and involves the standing and good name of the profession is indicated by a thorough editorial in the *New York State Journal of Medicine* for this September, 1912, in which the statutes of all the states in the Union are reviewed. The difficulties of solving the problem by legislative enactment are commented upon at length. The editor evidently has not considered our Rochester idea in this problem, and fails to appreciate that possibly there may be other methods of giving authority to medical testimony than by legislation.

In this paper, however, I wish to call your attention to the indirect advantages that will be felt by the profession itself and by its individual members. This phase of the matter has not been dwelled upon in so far as I know and it impresses me as of prime importance. It may be that these subtle indirect effects will ultimately outweigh the more obvious effects. The first indirect effect will be to emphasize the unity of interest of the whole profession. It will cause the individual to make his acts conform more closely to the ideals of our body. Ethically it will tend to improvement in the individuals and at large.

The second indirect effect it seems to me will be intellectual. Even if there be lists in but one or a few branches of medicine, the recognition of the principle involved will react very favorably on all the departments of medicine. There will be placed a premium upon more intensive effort for perfection in one branch in contrast to the present extensive effort to grasp and remain cognizant with the advance in the whole field.

Another indirect effect will be to tend toward limiting the number of specialists for new men about to announce their entrance upon a given specialty will realize that their preparation and experience and ability will be subjected to careful scrutiny in case it should be proposed to establish a list of those engaged in that specialty. It is obvious that this result will be attained without the establishment of such a list, but merely because that contingency exists. In fact the more gradually we attack the matter, the greater will be the advantage to the profession in compelling the most thorough training of our specialists. Another indirect effect will be the immediate disappearance of such absurd combinations of specialties as are exemplified at present in our local profession. In fact indirectly our Rochester idea will encourage men to completely limit themselves to their specialty and refuse all other practice whatever.

And finally let me consider the probable indirect effect upon the internist and the general practitioner. The man in general practice knows in what he should excel. It is constantly suggested to him by his patients, his journals, and by the papers that he hears even by those who are advanced specialists of various subjects. What we need today is medical diagnosis and medical prophylaxis and treatment. The day of the adviser and counselor in medicine to the family and to the individual is not waning, but actually in a newer sense just dawning. The general practitioner should be a physiologist and a psychologist. He must help his patients to avoid diseases and to attain to greater efficiency in their lives. The internist will strive to be all this and in a technical sense become a more proficient consultant. In fact

this great department of internal medicine offers the widest choice of opportunities for concentration of effort, such as diagnostic and therapeutic technic and the study and treatment of disturbances of all the most important organs and systems of our bodies. The real merit and esteem of our profession lies with the general practitioner and the internist. As these advance and perfect themselves, the whole profession will more nearly attain its purpose which is to efficiently serve the community.

(Read before the Monroe County Medical Society, at Rochester, N. Y., October 22nd, 1912.)

An Outline for the Treatment of Eczema

By W. W. QUINTON, M.D.
Buffalo, N. Y.

ONE might think that the last word had long since been said so far as the treatment of eczema is concerned. We are, however, daily reminded of the fact that this is not so, by the number of cases of this disease which go floating about from doctor to doctor, from general practitioner to specialist; their restless wanderings bearing silent testimony to the efficacy of their treatment.

The importance of the subject should be evident to even the most casual thinker if he will reflect that twenty-seven per cent. of all the diseases of the skin are classified under the heading of "eczema."

If I were called upon to state what is the first and most important step in the treatment of any cutaneous affection, I should unhesitatingly say, a correct diagnosis—and this certainly applies to the consideration of eczema. For example: One must expect a syphilitic eruption to prove more or less resistant if the patient is treated for eczema. A toxic dermatitis may assume the appearance of an eczema at some time during its course, but your eczema treatment will fail, unless you arrive at a correct diagnosis and remove the cause. Do not promise to cure your patient of eczema of the face when, in reality, he has lupus erythematosus. This advice may sound superfluous but these same mistakes—and many similar ones—have been made in the past and will probably be made again in the future.

It is a good working principle, in dealing with this condition, to start the treatment by searching for a cause. You will not always find it, but nevertheless, the effort is worth while. Not all observers believe in combined local and general treatment, but it has always seemed to me that ordinary common-sense would indicate a method of treatment, both medicinal and hy-

gienic, which should have for its object the return of the patient to a condition of the best possible state of bodily health. Having attained this, one may certainly expect to limit, to a degree, the eczematous attacks. The close observance of fixed hygienic rules must be insisted upon. The patient's diet must receive the most careful attention and all harmful food articles should be interdicted. Certainly it would occur to any of us, to relieve constipation at once, and to examine most thoroughly into the condition of the kidneys.

Let us now turn to a consideration of the local treatment. Here, many of us fail, for the reason that we do not accord to the disease the proper amount of respect. If we are not very familiar with its treatment, we reach for a medical book and try one of the many formulae which we find therein. Or, on the other hand, it may be that we have a stock remedy for all such cases regardless of their characteristics and individual peculiarities. Do not flatter yourself that you can give the patient this or that valuable prescription, with directions to anoint himself so many times a day with it, and blithely expect him to return to your office in a few days, cured and ready to fall on your neck in his gratitude. It will not happen this way. If you expect to get any results which will redound to your credit, you must make up your mind to devote a considerable amount of time to your patient. Every day will not be too often to see him and to give him a careful examination. The sharper and more observant your eyes, and the greater your experience with such troubles, the greater will be your success.

The initial treatment of an acute eczema should be the very mildest that we can possibly devise. Never can one make a greater mistake than to use an irritating or stimulating preparation at this stage. The more soothing the preparation, be it ointment or lotion, the quicker the acute symptoms will pass away, and the louder the patient will sing your praises. This antiphlogistic application must be continued until it ceases to benefit. The experience of the physician will tell him when this point has been reached—there is no royal road to this knowledge. The next preparation used must be desiccating in its nature to stop the weeping. This is also used until it is seen that it has no longer any effect, when it is replaced in turn by a mild astringent. After a variable time, depending on how quickly the eruption responds to the treatment, this may be changed again and an astringent ointment containing tar, may be substituted.

From this stage onward the strength of the tar is increased gradually until, on some of the more resistant, chronic patches, the pure tar is applied. Avoid the use of tar on the face, however. Here, we are obliged to substitute sulphur.

So much for the management of the ordinary case. The more complex cases will tax the patience of the medical man to the utmost. Variety is the spice of the treatment of eczema, and one's knowledge and ingenuity are constantly challenged by the disease, for prescriptions which will relieve one case, will be found to have little or no effect on another and apparently similar condition. If your application is a little too weak, your case will remain stationary; if a little too strong, expect trouble and you will not be disappointed. The treatment is progressive, and the patient must be graduated from each step to the next higher in the scale. If we ascend too rapidly we are notified of the fact in no uncertain terms, for the eczema will light up with amazing rapidity, to the discomfort of the patient and to our own chagrin. In this event, we have no discretion but to retrace our steps and to begin all over again. One or two such failures will teach us more caution, in this respect, than any number of warnings in a medical article.

The successful treatment of eczema depends on the amount of time and brains the attendant physician is willing to bestow upon it. It sounds simple and it is simple. That the game is well worth the candle, I am convinced. Show me a man whom you have cured of eczema, and I will show you a grateful patient.

Early Diagnosis in Ectopic Gestation

By JOHN G. W. KNOLL, M.D.
Buffalo, N. Y.

ON December 26, 1911, and again January 10, 1912, two cases of Ectopic Gestation came under my observation and I operated them at the German Deaconess Hospital on the above dates.

Case 1. Gave a history age 28, married two months, and first menstrual period after marriage was perfectly normal and on time.

The second menstrual period was five days late and only lasted for two hours and completely stopped. Two days later the same thing occurred. Four days later, there was a sudden sharp pain in right pelvic segment followed by a profuse bloody uterine discharge; also pain in rectum and retention of urine. Pulse 110, temperature 98.5.

Physical Examination. Uterus fixed and shoved to the left side, large mass which extended from right pelvic segment high up into abdomen, considerable pain on manipulation. Intra uterine measurement 5 inches.

Operation. On opening peritoneum, the cavity was almost colorless; the entire pelvic space was covered by dense adhesions.

After breaking through these, a large amount of dark blood clots were removed, exposing the ruptured tube and its foetal contents.

She had an uninterrupted recovery.

Case 2. Gives a history married 16 years, gave birth to child 15 years ago, and has not been pregnant since.

With the exception of a profuse Leucorrhoeal discharge, pain in right pelvic segment from time to time history negative.

At last menstrual period, she flowed only four hours and this was followed by excruciating pain in right side which radiated down the right leg obliging her to remain in bed. Temperature 98.5, pulse 115.

Physical Examination. Uterus was perfectly movable. A small mass was felt in lower right pelvic segment, mostly in cul de sac. Considerable pain on manipulation. Intra uterine measurement, 5 inches.

Operation. On opening peritoneum, which was deeply stained with blood, a small mass of clots were removed from right pelvic segment and cul de sac.

The fimbriated extremity of right tube was adherant to posterior surface of uterus. The tube contained besides the foetal contents, a few blood clots.

She had an uninterrupted recovery.

The early diagnostic facts I wish to call attention to are: 1st. The normal temperature and increased pulse rate.

2nd. Sudden pain in pelvic segments following appearance of bloody uterine discharge.

3rd. Physical examinations show mass in pelvic with increased intra utrine measurement.

I might state that the other adnexia in these cases were apparently normal.

In the face of a specific G. history of husband in Case 1, in both members in Case 2, Gonococci infection was not a factor in any way to assist in the diagnosis.

ABSTRACTS.

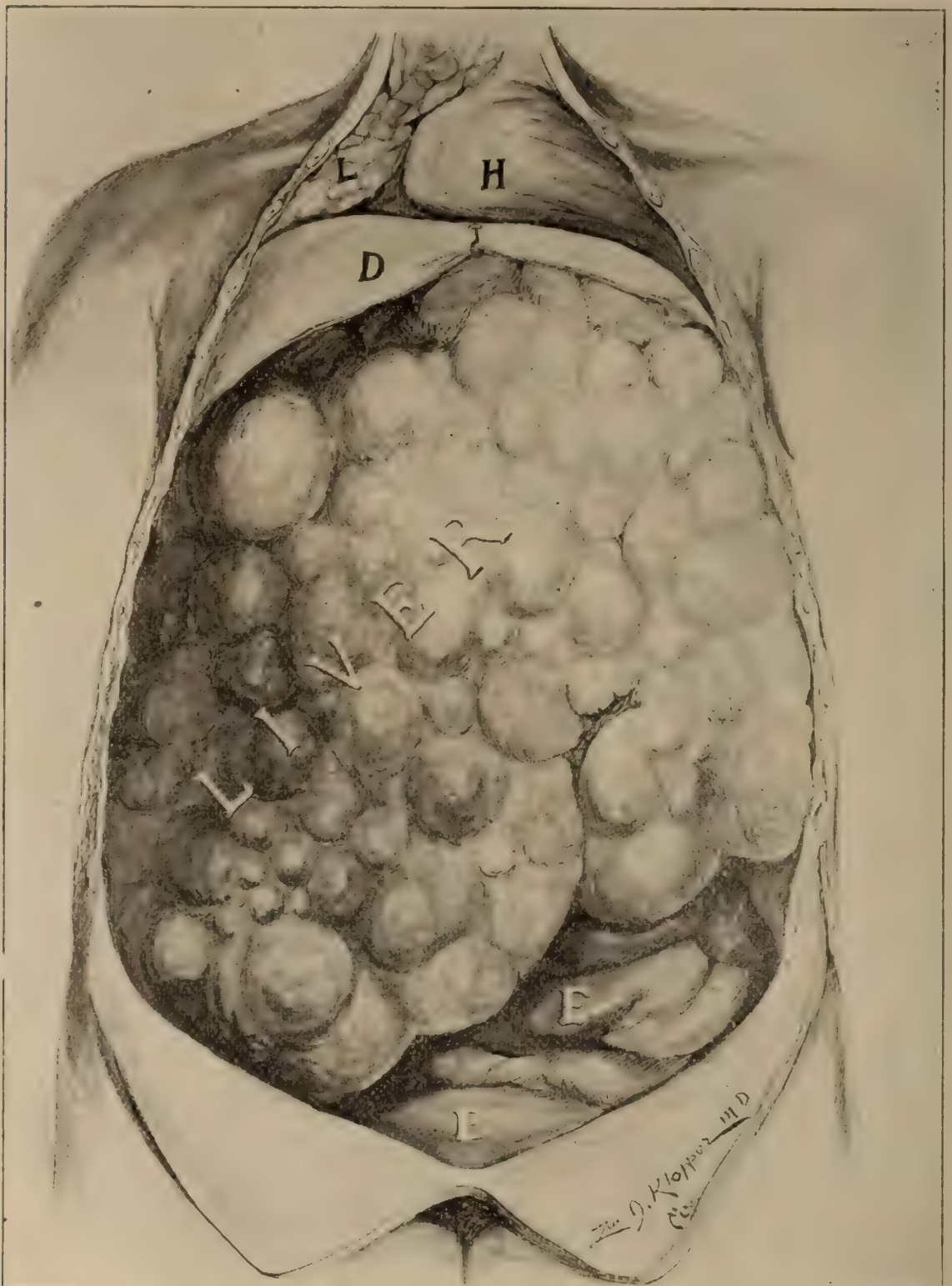
SYPHILIS OF THE STOMACH, Jerome Meyers, *Albany Med. Annals*, Oct., 1912. Male, 24, skin lesions and Wassermann reaction positive. Muscular swelling in epigastrium. Stomach 2 fingers' breaths below umbilicus recumbent, 5 standing. Radiograph shows dilated and sagging stomach. Improvement under KI. The author gives an extensive review of literature and tabu-

lation of cases to date. Articles of this kind are of the highest value, being complete monographs which should be saved for



reference. Through the courtesy of the editor, we reproduce Dr. Meyer's radiogram.

PRIMARY MELANOTIC SARCOMA OF IRIS WITH METASTASIS TO LIVER, Geo. F. Suker and L. N. Grosvenor of Chicago, *Ill. Med. Jour.*, Oct., 1912. Female, small black spot in iris first noticed



in 1901 at age of 23, operation followed by X-ray treatment for 18 months. Recurrence and operation in 1904. Recurrence and nostrum application in 1905. (Note by editor: However foolish, can we blame the patient?) In 1906 "therapeutic light" treatments. July 12, 1907, Suker did a complete exenteration of

the orbid and sinuses. December, 1907, on account of abdominal symptoms, exploratory laparotomy by Grosvenor, radical opera-



tion impossible. Death April 23, 1908. Through the courtesy of the authors and the editor, the illustrations are reproduced.

REFLEX STIMULATION OF THE VAGUS CENTRE, A. T. Brand, M. D., C. M., *Caledonian Med. Jour.*, Oct., 1912. Linimentum iodi is painted over the course of the vagus in the neck. Good results are reported for exophthalmic goitre, spasmodic asthma, pertussis and nausea and vomiting generally.

WIFEBEATING. Wm. F. Waugh of Chicago, *Wis. Med. Rec.*, Oct., 1912, puts up a plausible plea for this treatment of Mrs. Booze, Mrs. Giddy and Mrs. Frowsy.

PERICARDITIS IN INFANTS. Nobecourt, *Gaz. des Pract.*, Sept. 1, 1912. In nurslings and children up to the age of six, acute purulent cases are especially frequent, tributary to non-specific, pneumococcic, streptococcic and staphylococcic infections. They frequently follow pneumonia, broncho-pneumonia, measles, scarlet fever, whooping cough, etc. Rheumatic and tuberculous forms are rare. Acute rheumatic infection is frequent after the age of six or seven and is usually dry. In about half the cases, both pericardium and endocardium are involved. Rheumatic purulent pericarditis never occurs.

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One excuse is more convincing than several, however good each may be. And an absolutely valid excuse is not so good as getting a thing done in spite of obstacles.

Your Boy

Doctor, you are the hygienic guardian of the community, trained to prevent as well as to treat disease. More than other men, you realize the immense economy and efficiency of prophylaxis as compared with therapeutics.

Does your baby need to be circumcised?

Has your boy been vaccinated—and revaccinated after five years?

Can he breathe through his nose?

If he developed diphtheria, could you inspect his throat without making him gag and causing a fit of rage and terror that might result in fatal syncope?

Does he know poison ivy, deadly night-shade, datura, mushrooms, etc.?

Has he enough knowledge of means of infection—or aesthetics—not to use another boy's tooth brush, handkerchief, towel, etc., not to put coins in his mouth, not to drink ditch water, etc.?

Are there cavities in his teeth?

How much and what does he eat? Does he eat all sorts of trash between meals?

Can he swim?

Does he play in the street? Does he realize that he must stop, look and listen, before crossing a railroad track or passing a curb stone?

Is he so sympathetic that he will pick up a sick cat or visit a play-mate confined to the house with scarlet fever?

Do his bowels move daily and, if not, will he tell you about their condition?

If some big boy tries to teach him to masturbate or if he encounters a pervert, does he know his danger?

There are many more questions—ask them yourself.

Women in Medicine

A trifle less than 65 years ago, in our issue of January, 1848, we were so impressed with the "novel event of a female medical student being in attendance at the Geneva College" that we were "led to state the circumstances * * * as follows:"

"Shortly after the commencement of the lecture session, the faculty received an application for the admission of a lady. The faculty submitted the letter to the class which unanimously adopted resolutions expressing their willingness that the applicant should be received and pledging themselves to treat her with respectful consideration * * * Nothing has transpired as yet to disprove the propriety of the action and, in so far as her presence has had any influence, it has been conducive to a more strict observance of decorum than is usual with medical classes and any embarrassment which may have been felt by all parties has long since disappeared."

Incidentally, there are only four other extant medical journals in the western continent that can speak about "what we did" so far back as the BUFFALO MEDICAL JOURNAL. One of these was suspended for several years during the Civil War and another, so to say, traces its descent through a step parent which it bought.

As there is a prevalent notion that early women medical students encountered opposition and discourtesy, and as this notion is actually correct to a large degree, we are proud to note that western New York manifested a broad-minded spirit both as represented by the student body and faculty of what was at that time a relatively influential medical school and by the JOURNAL. It is by no means improbable that Dr. Corydon L. Ford when he went from the old Geneva school to the University of Michigan took with him not only his personal baggage, dissecting kit and cadaver, but also a tolerance of co-education which had an influence on the latter institution. And, as the University of Michigan was the first educational institution in America to catch the true university spirit, and was the model not only for all other state universities but for the expansion of eastern col-

leges into universities, it is easy to trace the influence of the courteous reception of this pioneer woman student in western New York, upon the whole course of medical co-education throughout the country.

It is true that at times and in places, prejudice has manifested itself against medical study and practice by women but, as a rule, this prejudice has been of extra-professional origin. Certainly, in recent years, the few complaints of women students and practitioners have mainly been due to a too liberal carrying out of a policy of good fellowship and a forgetfulness of sex by their male associates.

We would define prejudice, not as an academic opinion for or against a given policy but as coercion or annoyance of those who differ from us, or, on the other hand, of undue assistance or applause for those who believe as we do. It is a curious fact that as prejudice against or in favor of medical education of women has disappeared, there has been both an actual and a relative diminution of women medical students. According to the statistics of the A. M. A., since 1904, medical schools for women alone, have been reduced from 3 to 2; the total number of women students in unisexual and co-educational schools has fallen from 1129 to 679 and the yearly graduating class from 244 to 142. The male graduates have fallen off by almost exactly twenty-five per cent., the female by nearly forty-two per cent. since 1904. Viewed in an other way, in 1905 the women graduates composed 4.3% of the total; in 1912 a little more than 3.3%.

Alcoholic Beverages

This subject has been brought to our attention, particularly with reference to the appearance of advertisements of alcoholic beverages in the columns of this and other medical journals and in such a way as not only to excuse but to demand a statement of personal views. We may say, therefore that, not only personally, but by heredity, we stand not merely for temperance but for total abstinence and that this stand dates back about 120 years.

But, we believe that total abstinence from alcoholic beverages should have nothing to do with the question of the medicinal use of alcohol. It would be out of place to present here, a paper detailing our own notions with regard to the therapeutics of alcohol although, to prevent misunderstanding, it may be said that such a paper would probably represent the average views of the profession at large.

What we do want to emphasize is that opinions regarding the use of alcohol as a routine, should have nothing whatever

to do with its prescription as a drug or therapeutic adjuvant, that the person under the influence of alcohol should have exactly the same social and legal status as one under the influence of morphine, or any other drug, and that the best interests of genuine temperance are served by putting the marketing of alcoholic preparations on exactly the same basis as the marketing of digitalis, cannabis indica, diphtheria antitoxin or any other medication.

We should be very glad of assistance in reviewing numerous exchanges, in English, French, German, Swedish, Italian, Greek and Japanese. This work is good training, both in medicine and in language. We shall be pleased to hear from volunteers, who need not necessarily live in Buffalo.

We are very grateful for numerous expressions of approval. It should be understood that the value of a journal depends mainly on the cooperation of its readers and contributors. It is, therefore, not immodest to say frankly that the one thing necessary to further improvement is money. Bills were inclosed with the August issue and while individual subscriptions are very minor matters, in the aggregate, they are far more important than any one advertisement or group of advertisements. Prompt payment facilitates office work and leaves more time for bettering the reading matter. It is also required by the Post Office, of all journals enjoying the privilege of second-class rates and the allowance of sample copies depends on the paid-up subscriptions. In the long run, however, the strength of any periodical is its advertising—unless it has an "Angel" which is not the case with an independent journal. If our readers will pay attention to the advertisements, they will have a journal of the highest grade, in the news and scientific departments. Some advertisers are content with indirect evidence as to the value of publicity. Others want actual personal inquiries and orders. In any correspondence, it is fair to mention the periodical to which the publicity is due. It is best to do so by name as many advertisements—though only a few in this journal—are keyed. For example one business man told us that he deliberately gave a wrong address in a certain journal (not this one). Another does not understand most grown men know that catalogue K, S, W, etc., is all the same. Firms in large cities usually give only the city address, some not even this as they depend solely on wholesaling while firms in small towns often give explicit street addresses to key their advertisements. Others give the name of a building in one journal, a street number in another, a manager's name in another. Ob-

viously, most busy men pay no attention to these details, their sole object is to get a letter to the place desired. The result is that, unless the name of the periodical is definitely mentioned, credit for publicity is lost. The reason why busy men are bothered with circular letters is not that they are cheaper than legitimate advertising; not that they produce good results (one firm reported to us that they received inquiries—not orders—from only one per cent. of circular letters); but that the results can be accurately checked.

APOLOGY FOR ERRORS. Quite a number of errors in typography occurred in the November issue. These were corrected on proof but, in some way, the revised proof was overlooked. Considering the fact that there was an almost complete change of personnel at the printing office and that the journal was unfamiliar to all, in addition to the fact that a rush of other work made it necessary to hurry over details, it is surprising that more mistakes were not made.

Addition to Staff of Buffalo Medical Journal

Dr. C. A. Ewald of Berlin, has accepted the position of Associate Editor for Germany and promises soon to contribute an article, probably on diseases of the oesophagus. Dr. Ewald is well known to the physicians of western New York, not only on account of his pioneer treatise on Diseases of the Stomach, which became the standard for subsequent books by many authors, but in a personal way, since he was the guest of the Buffalo Academy of Medicine a few years ago, at what was, at the time, the largest meeting in the history of the Academy. Dr. Ewald's letter of acceptance is in excellent English which, indeed, he speaks and writes more fluently than many American Gastro-enterologists. We extend to Dr. Ewald, a most cordial welcome which, we feel sure, our readers will second.

TOPICS OF PUBLIC INTEREST.

DEATHS FROM TUBERCULOSIS number about 35,000 annually in the U. S. We quote this statement from an exchange and beg leave to call attention to the fact that the Census Report for 1908, ascribes over 78,000 deaths to this cause, for the registration area which, at that time, embraced about 51 per cent. of the total population. When facts are so easily obtainable, is there any excuse for publishing an underestimate of so gross a degree—between a quarter and a fifth of the true figures?

THE LANE MEDICAL LIBRARY of Leland Stanford, Jr., University, was dedicated Nov. 3. It is located at Sacramento and Webster Sts., San Francisco.

CROPS OF THE UNITED STATES.

	Million Bushels 1912	Million Bushels 1911
Wheat	720	621
Corn	3,169	2,531
Oats	1,417	922
Potatoes	414	292

Other staples have shown a corresponding increase, which should make prices lower and life less strenuous.

LUNACY EXAMINATION AND AUTOPSY FEES.—The Elmira Academy of Medicine has established a minimum rate of \$15. The minimum fee for an autopsy has been set at \$20. In our experience payment for autopsy is rare, except in medico-legal cases. In private cases the physician usually has to plead for the privilege of making it free and we recall a case in which the sister of a charity patient demanded to be paid for her consent. Arguing that a woman who would try to make money out her sister's dead body would be guilty of any crime, we thereupon demanded an autopsy to show that death was due to natural causes.

STERILIZATION OF CRIMINALS IN OREGON—The Supreme Court has recently, on a test case, upheld the constitutionality of the law.

MEDICAL CERTIFICATE PRELIMINARY TO ISSUANCE OF MARRIAGE LICENSE.—The Indiana Board of Health expects that this will be required by law within a year.

INTRODUCTION OF AIR PER RECTUM.—A Michigan City, Ind., workman has recently been killed by this form of practical joke. A similar case in the Atlas Engine Works of Indianapolis, several years ago, terminated in recovery. Dr. Willoughby Walling of Louisville narrated a case of rupture of the colon by water introduced from a hand syringe. (A. W. B. in *Ind. Med. Jour.*, Oct., 1912.)

THE HIGGINS MEMORIAL HOSPITAL of Olean, was dedicated Nov. 2.

THE PUBLIC SERVICE COMMISSION is after the electric companies. For Buffalo, it has adduced evidence that free service has been extended to officials and that the rates vary. There is no place in the world where cheap and abundant water power and communities of sufficient size for economic distribution are united as in western New York. Only the wealthy can afford electric light—not to mention heat—in the frontier cities, yet many small villages, where there can be no economy of wholesale distribution and where power must be produced from coal bought in small quantities and at necessarily high freight rates, furnish electricity so cheap that tenants of fifteen dollar cottages burn it all day and all night on their verandahs. The abuse of privileges by corporations, in so flagrant a manner, fosters socialism. The substitution of electric light and heat for that derived from combustion, is a matter of public safety and public health, as well as of individual convenience.

THE METRIC CARAT FOR DIAMONDS, 200 milligrams, is to be adopted in America. The present carat weighs about 205 milligrams. Possibly, if the meter, liter and kilogram were respectively smaller instead of larger than the yard, quart and 2 pound weight, there would not be so much opposition to their introduction.

STERILIZATION OF WATER BY ZINC. Diehner, a French scientist, claims that a piece of zinc in water, or the zinc surface of a galvanized pail, kills bacteria, probably by virtue of their secretion of some acid, while not enough zinc is liberated to be toxic. It is well known that bacteria die on any clean metallic surface.

PENSIONERS IN 1912, amount to 538 million soldiers and sailors, 322 million dependents, including widows, and 362 army nurses. The appropriation is 151 1-2 million dollars, a decrease of 3 millions from last year.

PEACE HATH HER HEROES NO LESS THAN WAR. 14 surgeons of the U. S. Marine Hospital and Public Health Service, at which army and navy men used to sneer, as a civilian service, have contracted yellow fever; 11 have died of tuberculosis, one of cholera Asiatica.

VICTIMS OF AN OVERCROWDED PROFESSION would do well to remember that there is an imperative call for medical missionaries, especially in China, but in various other countries.

ELECTRIC WARNING OF ENURESIS. Genouville of France has invented an ingenious device. The terminals of a battery—a wet cell would be more appropriate but we presume any form could be used—are connected with an electric bell via the diaper or a pad which, on becoming moistened with the natural saline solution, conducts the current and causes the bell to ring. Yankee ingenuity is rather a misnomer. While, in many respects, epoch making discoveries have been due to Americans, there are many exceptions and, in Europe, one finds the practical development of inventions much more rapid and general, because they are quickly reduced to a reasonable price.

POLIOMYELITIS INFECTION is considered by the Springfield, Mass., board of health to be carried by cats.

FAILURE OF HOMOEOPATHIC TREATMENT. A workingman killed by a current of 3500 volts at West Lynn, Mass., was subjected to a current of 50000 volts in the hope of resuscitating him, but without success. It is not stated, however, that this was done by a homoeopathic practitioner and it must be conceded that an “allopathic” dose was used.

SIMILIA SIMILIBUS. One of our contemporaries accuses Elbert Hubbard of vulgarity, employing a metaphor that impresses us as about as vulgar as anything the Philistine ever published, excepting the reference to the Genesee Hunting Club and to Taft and the Trusts. Another exchange prints a five-page diatribe on Hubbard's antagonism to vaccination a waste of ammunition.

PRESERVATION OF RUBBER. Michailowsky announces that sprinkling with naphthalin, kept rubber tubing in a glass jar, in good condition for three years and states that the method is available for all kinds of soft rubber goods.

THE AMERICAN SURGICAL ASSOCIATION has appointed a committee consisting of Drs. William L. Estes, South Bethlehem, Pa.; Thomas W. Huntingdon, San Francisco, California; John B. Walker, New York City; Edward Martin, Philadelphia; and John B. Roberts, Chairman, 313 S. 17th Street, Philadelphia, to report on the operative and non-operative treatment of closed and open fractures of the long bones and the value of radiography in the study of these injuries. Surgeons, who have published papers relating to this subject within the last ten years, will confer a favor

by sending two reprints to the chairman of the committee. If no reprints are available, the titles and places of their publication are desired.

ALVARENGA PRIZE.—The College of Physicians of Philadelphia announces that the next award of the Alvarenga Prize, being the income for one year of the bequest of the late Senor Alvarenga, and amounting to about \$180, will be made on July 14, 1913, provided that an essay deemed by the Committee of Award worthy of the prize shall have been offered. Essays intended for competition may be upon any subject in medicine and must be unpublished. They must be typewritten in English or accompanied by an English translation, and received by the secretary of the college on or before May 1, 1913. Each essay must be sent without signature, but must be marked and accompanied by an envelope bearing the same mark and containing the name and address of the author. The successful essay or a copy of it remains the possession of the college.

SCIENTIFIC LESSON FROM THE ATTEMPTED ASSASSINATION OF COLONEL ROOSEVELT. Arthur MacDonald, a criminal anthropologist of Washington, and author of a Senate Document entitled "Man and Abnormal Man," suggests the establishment of laboratories or bureaus for the scientific investigation of criminals and other dangerous abnormals. He believes that every large city, and every State and especially the Federal Government, should have such a laboratory.

"When any one sends to the President, the governor, or mayor, or any prominent citizen threatening letters, or repeatedly utters threatening words, or attempts to injure such officials, or is unreasonably insistent in demanding to see them personally, such individual should be detained at least a few hours and thoroughly studied by scientific experts in criminal anthropology, psychophysics and social pathology."

A bill for such a laboratory is now pending before the Judiciary Committees of both Houses of Congress.

MALE DENTAL INTERNE. The U. S. Civil Service Commission announces an examination to be held Dec. 11, in various places throughout the country, including the following: (C. H. means Court House) Binghamton, Buffalo, Elmira, Ithaca, Jamestown, New York, C. H., Ogdensburg, C. H., Plattsburg, C. H., Poughkeepsie, Rochester, Syracuse, Troy and Utica.

There is at present one vacancy, in the Government Hospital for the Insane at Washington. No candidates presented themselves for the examination announced for Oct. 23. The salary is \$600 and maintenance. Application should be made promptly for Examination form No. 1312.

MILK, IN BUFFALO, ADVANCED TO EIGHT CENTS A QUART. The hay crop this year is over 72 million tons, as against a little less than 55 million for 1911; there is also an unusually abundant late pasturage and a surplus of fresh vegetables beyond the demand for human consumption. Some of the milk dealers explain the rise in price as due to the increased severity of hygienic requirements; others say frankly that they want the additional profit. At any rate, unless the consumers can accomplish something, the cost of living will increase still further. The Housewives' League, organized in local circles has already attacked the problem with some success.

THE J. N. ADAM MEMORIAL HOSPITAL was dedicated on Tuesday, Nov. 12, at Perrysburg, N. Y. It is ideally located—save for its relative inaccessibility—on a hill side, 1500 feet above sea level, and only 50 feet lower than Raybrook. Beyond the expense of the site, which was donated by the late J. N. Adam during his mayoralty, it has cost about \$285,000, \$15,000 less than the allowance. It is adequate in every way but evinces a wholesome effort at economy throughout. The middle building, containing the dining room in a beautiful rotunda, with verandahs for use during summer, the kitchen, offices, recreation rooms, etc., connects with a dormitory building on each side, by corridors. While not quite completed, it is already in use and will accommodate about a hundred patients of both sexes. It is designed solely for incipient cases, a fact which the profession should remember in recommending patients. This limitation is necessary both for economy of maintenance, very few actual attendants being required, and to avoid the danger of infection and depressing influence of advanced cases, which will be cared for in the local county and projected municipal hospitals. Moreover, greater economy of construction could be secured than if the care of advanced cases, requiring more strict provisions for antisepsis and asepsis, had been contemplated.

Nearly two hundred physicians, philanthropists, politicians and near-politicians (to quote one of the speakers) attended the dedication. The generosity of the late J. N. Adam and the efficient services of Dr. John H. Pryor, were duly acknowledged, and in response, Dr. Pryor gave due credit to his associates and to the

city officials, architects and contractors, all working in harmony.

The Hospital will be in charge of Dr. Otto R. Eichel, with Dr. Horace Lo Grasso, formerly of Buffalo, as assistant. Patients will pay for board so far as practicable but provision will also be made for suitable municipal charity cases. We understand that the thrifty Cattaraugus County assessors have already taxed the institution. It is a shame that any philanthropic institution should be taxed.

A CLINIC ON POLIOMYELITIS will be held at Alumni Hall, University of Buffalo, Fridays, Dec. 13 and 20, at 4 P. M. The profession is invited.

SADISTIC MURDER. The mysterious disappearance of a little boy from Lackawanna, last fall, has been cleared up by clues obtained from anonymous letters of confession, or rather of boasting, from a sexual pervert. The dismembered body was found in a vault. An arrest has been made but, at present writing, it is doubtful if the right person has been apprehended. Several similar crimes are referred to in the letters mentioned. Sexual perversion and inversion were rarely heard of in America up to a few years ago. Three inverts were known by reputation to Buffalo boys who are now middle-aged. One of these was a street car man of whose subsequent career, we are ignorant. The others were prominent merchants, both of whom are now dead. In the case of one of them, it is doubtful whether his inversion passed beyond the mental stage. The other may be considered as a facultative invert, as we heard complaints of his advances from two patients within a few days, one patient being a young man of fine physique, the other a woman. Unfortunately, within the last few years, disgusting practices have become so familiar that, a short time ago, we heard of a boy not over six years of age use a term of this nature in derogation of a playmate, probably in a figurative sense. Covert allusions are also occasionally heard on the stage and pervert practices are growing in frequency. No nation can persist in a state of indecency.

THE CLINICAL CONGRESS OF SURGEONS OF NORTH AMERICA held its third annual session in New York City, Nov 11 to 16, with Headquarters at the Waldorf-Astoria. The demonstrations included both operative general surgery and gynaecology, various surgical specialties, and radiology, also demonstrations of obstetric work, physiologic experiment, pathologic exhibits, etc. Evening lectures were held and various special trips, as to the Brooklyn Navy Yard, were arranged. As, for many of the clinics, special

tickets were required, which were issued to applicants in order, at 8.30 A. M., it is obvious that the Congress involved steady hard work for the majority of those in attendance. About 2400 physicians were registered. Among the many useful accomplishments of the session, was the inauguration of a plan of lay teaching to secure early attention to malignant disease of the uterus. An unfortunate accident marred the occasion. A patient at the Polyclinic died, after the intraspinal injection of stovaine, before the operation, for hernia, by Dr. Wm. S. Brainbridge, could be begun.

SOCIETY MEETINGS.

Secretaries of County Societies of the western four District Branches of the MEDICAL SOCIETY OF THE STATE OF NEW YORK and of other professional organizations in this territory, are requested to send notices and brief abstracts for free publication. Similar notices of societies of general scope are also desired. Full proceedings will be printed at cost. Copy should be received before the 20th of the month to insure insertion in the next issue.

THE SCIENTIFIC STUDY OF ALCOHOLIC PROBLEMS. In New York City in 1870, a number of physicians and medical experts formed an organization, called The American Society for the Study of Alcohol and Other Narcotics. This was the first medical association in the world to take up the study of alcohol and inebriety, and determine from clinical experience, laboratory studies, and grouping of facts the phenomena of the spirit and drug neuroses.

The special purpose was to study this subject above all theories and conclusions, particularly its etiological, physiological, therapeutic and medico-legal relations; also to compile and make available such studies for home, office and institutional treatment, and point out the remedies and prophylactic measures for restoration and cure.

The 42nd annual meeting of this society will be held at Washington, D. C., Dec. 10th and 11th, 1912. A large programme of scientific papers from medical men, many of them distinguished foreigners, will be presented. This meeting and the subjects discussed will attract a great deal of attention, not only among medical men, but an increasing number of laymen, who have an intense personal interest in alcohol and drug taking.

Programs and further information can be had by addressing the Secretary, Dr. T. D. Crothers, of Hartford, Conn.

A joint meeting of the NEW YORK NEUROLOGICAL SOCIETY was held with the Section on Neurology and Psychiatry of the N. Y. Academy of Medicine, November 12. The program:

A case of "Periodicity in the Male," by Dr. C. P. Oberndorf. Aborted Forms and Preparalytic Stages of Acute Poliomyelitis as Observed in the Buffalo Epidemic, by Dr. E. A. Sharp, of Buffalo. Discussion by Professor James Putnam and Dr. Nelson G. Russell of Buffalo. "Experiences with the Meningeal Fibro-Endotheliomata," (twenty minute presentation), by Dr. Harvey Cushing. Discussion by Drs. Sachs, Dana, Starr, Elsberg and Taylor. L. Pierce Clark, M. D., President. E. G. Zabriskie, M. D., Secretary.

THE BUFFALO MEDICAL AND SURGICAL LEAGUE met Oct. 14, at the Lafayette Hotel. The paper of the evening was: "Empyema in Children," by Dr. A. W. Hengerer. In the discussion, Dr. Reu reported a case of amoebic infection of the gall bladder that had penetrated into the pleural cavity and thence into the lung. This patient expectorated quantities of material containing amboebae.

THE BUFFALO ACADEMY OF MEDICINE has held the following meetings since lately noted: Oct. 22, Pathologic Section: Clean Milk from the Public Health Standpoint, Dr. Charles E. North of New York City, who described his model farm at Homer and advocated the pasteurization of all milk. He showed lantern slides to illustrate the bacterial content of certified milk. Dr. N. G. Russell spoke on Certified Milk in Buffalo and a general discussion followed. Surgical Section, Oct. 29: Dr. Chevalier Jackson of Pittsburg, gave a Lantern Demonstration of Some Advances in the Methods of Examination of the Air and Food Passages, mentioning particularly the advantages of direct laryngoscopy, bronchoscopy for the extraction of foreign bodies, and oesophagoscopy and gastroscopy, the last especially in co-operation with the surgeon during abdominal section. It is typical of the humanitarian aim of the medical profession that Dr. Jackson spoke most modestly of his wonderful original work and laid stress, not on the scientific and technical aspects of his subject, so much as on the necessity of legislation to protect little children—and occasionally adults too,—from the action of alkaline caustics sold for domestic use without sufficient cautionary labeling. Medical Section: November 12, Dr. Charles G. Stockton read a paper on Visceral Syphilis, with collation of experience especially for the stomach and liver, with a view to establishing diagnostic standards. Dr. A. L. Benedict reported a case of

Elephantiasis and Ascites due to Obstruction at the Receptaculum Chyli or in the Thoracic Duct, with allusion to a case of terminal left sided anasarca probably due to coagulum obstructing the major duct.

Obstetric Section, November 19. Dr. E. Gustave Zinke, of Cleveland, discussed The Comparative Merits of Medical and Surgical Treatment of Eclampsia, strongly favoring the use of large doses of veratrum viride, mild purgation, sweating and milk diet.

THE MEDICAL SOCIETY OF THE COUNTY OF NIAGARA met at Lockport, Nov. 12. Dr. Scott of Niagara Falls read a paper on "The Art of Differentiating Suicide from Homicide."

THE ROCHESTER ACADEMY OF MEDICINE met Nov. 13 and listened to a paper by Dr. F. J. Parmenter of Buffalo, on "The Relation of Vaccine Therapy to Medicine and Surgery."

The Joint Medical Societies of Rochester, gave a dinner on Nov. 21 to Prof. Von Noorden and listened to his paper on "The Treatment of Chronic Nephritis."

The Joint Medical Societies of Rochester, had another dinner and meeting on Nov. 25, in honor of Hon. Homer Folks, Dr. A. H. Garvin of Raybrook, and Dr. J. H. Pryor of Buffalo.

OUR CONTEMPORARIES.

The *American Practitioner* of October, is devoted almost entirely to articles concerning public health—a most excellent number.

The *Detroit Medical Journal* of October, contains a symposium on the question of fee splitting. None of the writers seem aware that the crusade against this evil was initiated by Dr. M. D. Mann of Buffalo, in a paper presented to the Medical Society of the Co. of Erie, Feb. 21, 1910. Dr. J. H. Carstens makes the somewhat novel plea that the surgeon, in abandoning general practice, gives hundreds of dollars to each of his potential competitors, thereby virtually paying a commission in advance.

The *Old Dominion Journal of Medicine and Surgery* of August, and the *Medical Fortnightly*, of Nov. 11, 1912, abstract Col. Crego's article on Meningitis from our May issue.

The State Charities Aid Association has started to publish from its headquarters, 105 E. 22d St., New York, the "S. C. A. A.

News" (sic), an 8-page bulletin intended for free distribution, containing much interesting information, especially regarding the fight against tuberculosis. We would advise our readers to apply for it.

The *Medical Times*, Nov., 1912, contains an interesting symposium on the question of a medical editor for a newspaper. The editor, Dr. Simon Baruch, Medical Editor of the *Sun*, Oswald Garrison Villard, President of the *Post*, James Kelly, General Manager of Chicago *Tribune*, Frederick Roy Martin, Assistant General Manager of the Associated Press, Leigh Reilly, Editor of the Chicago *Evening Post*, Jay B. Benton, City Editor of the Boston *Evening Transcript*. Melville E. Stone, General Manager of the Associated Press, and Talcott Williams, President of the Pulitzer School of Journalism, all contribute and all speak on the affirmative. It is noteworthy that most of the non-medical contributors emphasize the difficulty of finding the right man. The writer, having at one time made some attempt at writing for literary and news periodicals, with an average of about 90% of rejections, can appreciate the fact that it is difficult to suit the popular appetite for reading matter, or at least the standards of those who judge whether it would be suited or not. Those of us who have been unsuccessful can find some comfort in the historic fact that many acknowledged master-pieces have been at first rejected and that well known literary favorites who occasionally try the experiment of sending a story under an unknown name, usually find that it is rejected by the very men who are clamoring for their wares. The writer had one article rejected by several literary magazines. It was then published in a medical journal and published in abstract, with illustrations, by one of the New York papers. We can also derive comfort from the professional rating of physicians who have gone into "writing" for the lay press, as a business. But, however, we try to sooth our vanity, the fact remains that medical men, as a rule, are not satisfactory as writers for the non-medical press. Possibly the reason is indicated by the fact that we call our work "articles" or "reports" and that the newspaper man calls his work "stories." That is to say, we neglect literary style—too often grammar—try to condense, and to exclude every extraneous allusion, however it might please the fancy; in short we concentrate on the intrinsic interest of the case or subject. The magazine and press writer, on the other hand, except in the matter of murders, suicides, personals, etc., deals with occurrences which are not—or which he assumes are not—of interest to his readers, except as he makes them so. In this

effort, he very justly feels that accuracy may be sacrificed, whereas the medical man is trained by habit to be a slave to accuracy. Then, too, the latter does not speak the ordinary language of the country but a mixture of this with a technical vocabulary of some 40,000 words. The writer remembers, during the time that he was studying blood vessels, quite unconsciously mentioning a walk to the "bifurcation" of Huron St. (Ann Arbor). The knack of stating technical facts, accurately, in ordinary language, and of explaining a necessary technicality in plain English, without pedantry, is something that few of us possess. The faculty is quite as rare as the ability to use two languages idiomatically.

PERSONALS.

Our readers are requested to send notes concerning themselves and others.

Dr. Robert R. B. FitzGerald, of Lockport, a graduate of Toronto, 1905, was naturalized, Nov. 9.

Dr. Harry Huver of Buffalo and Williamsville, has contracted to administer natural gas to Kenmore.

Among the 20 Buffalo delegates to the N. Y. State Conference of Charities and Correction, at Syracuse, Nov. 19-21, were Drs. John H. Pryor and Arthur W. Hurd.

Dr. L. M. Andrews of Warsaw has been appointed jail physician for the ensuing year.

Dr. J. A. Rafter of North Tonawanda was elected mayor of that city by a large majority.

Dr. John H. Grant has moved from Albany to 202 W. 79th St., N. Y.

Dr. George S. Staniland has moved to 617 W. Ferry St., Buffalo.

Dr. Russell H. Wilcox of N. Tonawanda spent two weeks hunting in Chemung Co., during November.

Dr. Walter Calihan has returned to Rochester and opened his office at 170 Clinton Ave., South.

Dr. V. D. Bozovsky of Dunkirk delivered a lecture in the High school Auditorium, Nov. 14, on the Causes of the Present Turkish War. Dr. Bozovsky is a Bulgarian by birth, though a resident of this country for 15 years. One of his brothers is a Major in the Bulgarian Army.

The Editor acknowledges the courtesy of the Hon. Simon Seibert in taking him from Gowanda to Perrysburg in time to be present at the dedication of the J. N. Adam Memorial Hospital.

Dr. Fenton B. Turck has moved his office from Chicago to 14 East 53rd Street, New York City, Dr. Turck is locating in New York as a director of a research laboratory founded to further the study of the cause and treatment of diseases of the digestive tract.

Dr. Warren W. Britt of North Tonawanda, has returned from Chicago, where he attended the convention of the American Medical Association.

Dr. Wm. R. Blighton of North Tonawanda, addressed the Legislative Committee of Montpelier, Vt., on "The Compulsory Vaccination Bill." Dr. Blighton spoke in opposition to the bill.

Dr. H. W. Bowers and son, of North Tonawanda, have returned from Toronto.

Dr. F. X. Fiegel of Tonawanda, has moved to Rosewell, New Mexico. On account of Dr. Fiegel's poor health, a change of climate was necessary.

Dr. A. J. Martin of North Tonawanda has returned from a nine's weeks trip to the Pacific coast.

Dr. W. E. Dignen of Buffalo has returned from Addison.

Dr. William M. Brown of Rochester is making a good recovery from his recent illness.

Dr. Anthony Bassler of New York City has been appointed Clinical Professor of Medicine in the N. Y. Polyclinic School and Hospital.

Among the Buffalo physicians who attended the Clinical Congress of Surgeons, were Drs. Edith R. Hatch, George F.

Cott, Wm. H. Mansperger, John Fairbairn, Charles Bethune, Marcel Hartwig, Irving W. Potter, Wm. L. Phillips, and Ray Johnson.

The following physicians from Elmira attended the Clinical Congress: Drs. Colegrove, Fudge, Booth, Soble and Haase.

At the Clinical Congress of Surgeons held in New York City, the following from Rochester were present: Drs. Bascom, Berkman, Bowen, Bissell, Crews, Dickinson, Fowler, Howk, O. E. Jones, W. B. Jones, Remington, Roe, Sanders, Stoddard, Ward and Wickens; also Dr. Fleming of Charlotte, Dr. Hazen of Brockport, Dr. Tinker of Ithaca, and Dr. Roby and Dr. Jewett, who attended the Clinic for Children's Diseases.

Dr. Willy Meyer of New York, after demonstrating his apparatus for negative pressure, met Dr. George E. Fell of Buffalo, with whose pioneer work in artificial respiration, he was already familiar. He credited Dr. Fell with laying the foundation for negative pressure apparatus.

Dr. Robert P. Bush, of Chemung Co., was relected to the Assembly. Dr. Bush has done good work in leading the fight against legislation which would abolish our present vivisection laws.

Drs. Fisher, Baker, Mark, Parke, Voorhees and Haase, of Elmira, attended the Sixth District Branch at Binghamton, on Sept. 15th.

Dr. Ira W. Livermore of Gowanda, recently delivered a lecture on the History of the Niagara Frontier, illustrated with stereoptican views.

OBITUARIES.

Major-General Robert Maitland O'Reilly died at his home in Washington, November 3, from uremia; aged 68. Dr. O'Reilly was Surgeon-General of the U. S. Army from 1902 to 1909.

Dr. Franklin R. Pitner died at his home in Clay City, Ill., Sept. 29, lacking 12 days of being 99 years old. He graduated at the old Transylvania Medical College. Except for two years spent in California soon after the discovery of gold, his life was spent in Illinois, and he was engaged in active practice till he was 90.

Dr. William Whitney Kitchen, formerly of Buffalo, accidentally shot himself while cleaning a revolver, Oct. 17. About two years ago, he was appointed U. S. Consul at Teneriffe. The remains were brought to Buffalo and the funeral was held from the Scottish Rite Cathedral.

Dr. Paul Segond, Surgeon-in-Chief at the Salpetriere, Paris, died Oct. 27.

Dr. John Duncan MacPherson of Akron, N. Y., Michigan, 1883, died at his home, Oct. 31, 1912.

Eva Viola Mead was born at East Otto, Cattaraugus County, in 1871. In 1884 her family moved to Springville, N. Y., where Eva entered the high school. She was a brilliant pupil, graduating at the age of sixteen. She immediately began teaching, in which work she was successful from the first. She taught for eight or nine years in Cattaraugus County. In 1896 she came to Buffalo and began teaching at No. 51. She was put in charge of the ninth grade in 1899 and continued in this school until she gave up teaching for the practice of medicine.

Miss Mead entered the University of Buffalo in 1892. Her first year in college was followed by a year or two of teaching, in order to earn the necessary money for her college expenses. After she began to teach in Buffalo she again took up her studies in the University, and graduated in 1900. In 1903 she opened her office at 426 Dearborn Street. She continued to practice medicine on Dearborn Street until last October when she moved to her new home, 241 West Ferry Street.

Her confreres respected her judgment, knew her for a successful physician who ably and conscientiously cared for a large practice. But the thing for which she will longest be remembered was her warm heart. She practiced much among the lowly, knew what life meant to the poor and was ever ready to serve the humblest with every means at her command—skill, time, money. Hers was a great character, simple direct, without guile or pretense, unconscious of her own worth.

NEW INVENTIONS

J. S. Stillwell, West Orange, N. J. 1,041,896. Malted Whey.

A. H. Stone, Boston, Mass. 1,041,897. Depilatory and Process of Making it.

Kate Van Hook, Hiawatha, Kansas. 1,042,058. Massage Apparatus.

Henry Green, Hartford, Conn. 1,042,109. X-Ray Tube.

D. W. Dorrance, Koler, Oreg. 1,042,413. Artificial Hand.

Gustav Fritsche, Strzebowitz near Schonbraum,, Austria-Hungary, assignor to The Roessler & Hasslacher Chemical Co., New York, N. Y. 1,042,422. Germicide and Insecticide.

S. B. Goff, Camden, N. J. 1,042,549. Fountain Syringe.

Jas. J. Holland, Philadelphia, Pa., and Wm. Discher, Toledo, Ohio. 1,042,556. Nebulizer.

J. B. Wagoner, Los Angeles, Cal. 1,042,624. Recital Dynams.

G. J. Kelley, Attleboro, Mass. 1,042,685. Atomizer.

Chas. Goulding, Chicago, Ill. 1,042,785. Pill and Tablet Counting Machine.

J. J. Myers, E. Lansing, Mich. 1,042,815. Model of the Human Eye.

W. O. Kaiser, Burlington, Iowa. 1,042,923. Ointment Machine.

Heinrich Krane, Munder, Germany. 1,041,105. Drop Bottle.

N. E. Mighell, Marshalltown, Iowa. 1,041,138. Surgical Appliance.

Lucy Alden, Saginaw, Mich. 1,041,225. Catamenial Garment.

J. L. Bornstein, Dayton, Ohio. 1,041,420. Sanitary Support

Heinrich Thron, Frankfort-on-the-Main. 1,041,528. Mfg. of Esters of the Hydrocinchona Alkaloids.

Heinrich Hoerlein, Vohwinkel near Elberfeld, Germany, assignor to Farbenfabriken vorm Friedr. Bayer & Co., Elberfeld, Germany. 13,477. Phenylethylbaibituroic acid.

Ludwig Benda, Frankfort-on-the-Main, Germany, assignor to Farbwerke vorm Meister Lucius & Bruning, Hockst-on-the-Main, Ger. 1,040,260. 2.5 Diaminobenzene-Arsenic Acid.

H. J. Collis, Taunton, Mass. 1,040,279. Ankle Support and Protector.

L. E. Knott, Boston, Mass., assignor to L. E. Knott Apparatus Co., Boston, Mass. 1,040,356. Apparatus for Determining the amount of Carbon-Dioxide in the Air.

W. E. Poindexter, Sedalia, Mo. 1,040,404. Pile Truss.

E. W. Schneider, New York, N. Y., assignor to The Mearns Ear Phone Co., New York, N. Y. 1,040,428. Device for Aiding the Hearing.

E. W. Schneider, New York, N. Y. 1,040,429. Device for Aiding the Hearing.

Allen De Vilbiss, Toledo, Ohio. 1,040,523. Bone Forceps or the Like.

Francis H. Escherich, Washington, D. C. 1,040,659. Nursing Bottle Holder.

CORRESPONDENCE.

54 Wigmore Street, London, W.

Editor BUFFALO MEDICAL JOURNAL,

Dear Sir.—My attention has been called to a paragraph you have kindly inserted in your journal with reference to the Historical Medical Exhibition which is being organized to be held in London at the time of the Meeting of the International Medical Congress next summer.

I noticed that you have a collection of ancient books on medicine and other interesting objects, including Indian bones showing fractures, and syphilitic lesions. You have also by this time probably had further promises of exhibits and I should greatly appreciate your kindness if you could furnish me with a list and description of any such objects you might be able to send for the Exhibition.

Thanking you for the trouble you have taken and awaiting the favor of your reply, I am,

Yours very truly,

HENRY S. WELLCOME.

We trust that the profession will take an interest in this exhibit. It occurs to us that the local Academies might well devote an evening to an exhibit of old books, rare specimens and various objects of historic value. Even if it is not feasible to send an exhibit to London—and in no better way can Western New York bring itself before the profession of the world—such exhibits would have a considerable educational value. It might even be well to extend the invitation to other than members of the profession.

Domestic Bull Crossing with the Buffalo Cow

I was the first to show by certain new theories how males and females are produced, as can be seen on page 645 of Vol. X of the BUFFALO MEDICAL JOURNAL, 1855, and now I would add to this that I have observed that crossing the domestic bull with the American bison almost invariably produces females. I will say that

the domestic bull is so fearful of the Buffalo cow that he neglects the Buffalo cow till the ovum becomes very mature and thus the products are more likely to be females, for the very mature impregnated ova are more likely to develop into females, and the more immature ova develop into males.

SILAS HUBBARD, M. D.,
East Aurora, N. Y.

NOTE.—It is not often that a Journal has the pleasure of supplementing an article by another communication from the same author 57 years later. Dr. Hubbard's original article is an elaborate study of cross breeding, well worth our attention and we shall be pleased to allow anyone interested to refer to it. Dr. Hubbard graduated in medicine, 70 years ago, at the Castleton Medical College, Vermont. This institution was chartered in 1818 and was discontinued in 1861. It graduated 350 students.

Good and Bad Filters

A great many inquiries have been made of the Bureau of Bacteriology regarding the efficacy of water filters. Unfortunately, the majority of such devices, as operated in individual households, do not render the water absolutely safe for use. There are filters which, when properly installed and operated, will remove bacteria. The mere attaching of a filter to a water supply and the occasional scrubbing of the inner cylinder does not insure the rendition of a pure water. A great many such devices are, at the present time, in general use, the individual user having a false feeling of safety.

The laboratory will test the working efficiency of any individual water filter upon the request of the resident of the city of Buffalo having the filter.

As this may be a time taking procedure, the requests should be made in writing, direct to the Bureau of Bacteriology, which division will perform the work at the earliest possible moment.

DR. WM. G. BISSELL.

The Shakespeare Myth

To the Editor MEDICAL JOURNAL, Buffalo:

Sir.—As in your October issue you referred to the above, I think you would be doing a great service to the English speaking race everywhere, if you would accord us a little of the valuable space in your journal which has so wide a circulation.

When Bacon was born the English tongue, as we now under-

stand it did not exist. And when as a youth he saw in Paris what the Pleade (the seven men) had done in France by changing what they described as a barbarous jargon into an elegant French language, Bacon determined that he would do as much for England and create an English language capable of expressing the highest thoughts.

At that period very few books existed in the English tongue that could be considered to be literature, excepting "The Schoolmaster," by Roger Ascham, "The Governor," by Sir John Eliot, and "Arts of Rhetoric," by Thomas Wright.

In 1566 a catalogue was made of Sir Thomas Smith's library of about 1,000 volumes. Only five of these were in English, viz: Henry VIII, Theology, Literature, Tenures (law); Hill, Chronicles; Fabian, Chemistry, etc., and Art of Navigation, all these being technical works.

A grammar school was a Latin grammar school where English was not taught and where Latin was never translated into English.

In 1580 when Bacon was 20 years old the Statutes of Harrow School provided that no boy excepting in the lowest form should speak anything but Latin even in the playground.

I desire to impress upon your readers the fact that our present English language was created by Francis Bacon, and that there was not a single writer of any importance in "the Elizabethan golden age of literature" who wrote independently of Bacon's instructions.

All writers are agreed that the English language of today is founded upon the 1611 English translation of the Bible and upon Shakespeare's plays.

In the preface of the Bible of 1611 we are told that great pains had been taken to ensure that no good English word should be excluded; and J. A. Weisse tells us that about 15,000 different words are employed in the Bible. With respect to Shakespeare (we mean the folio of 1623), Max Müller tells us it contains 15,000 different words. This is, however, an under-estimate. Among the 2,000,000 words contained in the plays there are about 22,000 different words, 7,000 of which are new words which, as Murray's New Oxford Dictionary tells us, are introduced into the English language for the first time by Shakespeare. Does any one suppose that the illiterate Stratford clown knew more than 300 or 400 words? Although the English language was thus enormously enriched by Shakespeare, and although many thousands of words have been added since his time, yet neither Dickens nor Thackeray made use of more than 7,000 or 8,000

different words in all their writing. Max Müller informs us that "a well-educated person who has been to a public school and an university * * seldom uses more than 3,000 or 4,000 words."

In the preface to the Bible we are also told that great endeavors had been made to secure a variety of expression, and Max Müller states in reference to Shakespeare that he "probably exhibits a greater variety of expression than any writer in any language."

About 48 persons whose names are known translated the Bible for the 1611 version. But, as Archdeacon Westcott, writing in the *Times* of March 22, 1912, says in reference to the 1881 revised version of the Bible, "successful literary results cannot be achieved by syndicates. Anyone turning over the pages of the Authorized Version of the Bible, and reading half-a-dozen verses here and half-a-dozen verses there in the books that compose the volume (aloud by preference) cannot fail to perceive that the grand rhythm which runs throughout the whole is not the work of a syndicate, but must be the product of one great master mind.

The 1611 Bible is ornamented with Baconian symbols, and in my own special copy of the second edition (also 1611) these symbols are Rosicrucianly marked to call the attention of the initiated to them, and to tell them that the 1611 Bible is without possibility of doubt one of Bacon's books.

Bacon's secrets have always been known to certain leading Free Masons, whose number was strictly limited to nine, until 1910. But in that year, which is 287 years after the issue of the folio of the "Shakespeare" plays in 1623, the number of fully "informed" Masons was raised from nine to thirty-three. Outside of that "circle" I do not suppose there are more than three or four persons besides myself who are "informed" of this fact.

When Bacon was born English as a literary language did not exist, but ere he died he had succeeded in making the English language the noblest vehicle of thought ever possessed by mankind. This he accomplished mainly by *his* BIBLE and *his* SHAKESPEARE.

V. EDWIN DURNING LAWRENCE,
13 Carlton House Terrace, London, England.

Note. We are glad to print the above interesting letter, in spite of its being rather outside of the scope of the JOURNAL. While recognizing the great influence of Bacon in perfecting the English language, it must be conceded that it was a good deal more than a jargon and had a considerable literature before his

time. English, as a Franco-Saxon development distinct from Anglo-Saxon, probably began to be formed even before the Conquest of 1066 for the Normans had obtained a foot-hold in England before William. The English language supplanted French in courts of law in 1362 and, at about this time, Chaucer and others wrote fairly good literature in English that is quaint but but still understandable. As we stated in the review of Mr. Lawrence's book, anyone competent to judge, contemporaneously or otherwise, would have suggested Bacon as the most probable author of "Shakespeare" if the works known by that name had been anonymous. But it does not seem probable that an "illiterate Stratford clown" could have had Shakespeare's forehead, enjoyed the local prestige, or mingled with London society, as did Shakespeare, if he had been merely a tool. It is not so far outside of medical interests to declare boldly that Max Müller's estimates of vocabulary are ridiculously low.

BOOK REVIEWS

STATE BOARD EXAMINATION QUESTIONS AND ANSWERS, of the U. S. and Canada. 4th edition. 812 pages. \$3.00. Wm. Wood & Co., New York.

There is not much opportunity for criticism on a work of this nature unless we hark back to the examining boards. The compilation will appeal especially to undergraduates and candidates for license.

NEW ASPECTS OF DIABETES. Dr. Carl von Noorden. Vienna. Published by E. B. Treat & Co., New York. 160 pages, \$1.50.

This book comprises the lectures at the New York Post-graduate Medical School in Oct., 1912. It has, therefore, the limitation to novel or, at least, recent discoveries and theories and the practicality demanded of the lecturer. So much has been presented in brief form that it is impossible to abstract and, at the same time, preserve the symmetry of the discussion. Neither do we wish to anticipate the careful reading which the book deserves by a random selection of topics. One point, however, we note with pleasure; the ground-word of the glycogenic function of the liver. Some time ago, a student commented on the fact that this function was taught by physiologists and neglected by most writers on diabetes and he wondered if the physiology of the liver dealt with real or imaginary processes.

YEAR BOOK OF THE PILCHER HOSPITAL, April 1, 1911, to March 31, 1912, being the second year of the operation of the hospital. Published by the hospital staff, 145 Gates Ave., Brooklyn. 197 pages, illustrated.

The cases are classified as fractures, cancers, benign growths, urologic cases, etc. About half the book consists of appendices.

BUFFALO MEDICAL JOURNAL

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ORIGINAL ARTICLES

Pollution of Lakes and Rivers

From a Canadian Viewpoint

By CHAS. A. HODGETTS, M.D., D.P.H., L.R.C.P., Lon., F.R.San-I.
Medical Advisor, The Commission of Conservation

IT is quite apparent, even to a most casual student of the question, that while the great tide of industrial development has brought to us wealth, both national and personal, yet that same tide has brought with it sickness, suffering and death, which count for national loss and personal suffering. Man, the manufacturer, in his haste to get rich quick, has transgressed the laws of health: it is safe to say that there is not a river on the Continent of North America which is not an open sewer; and our fair lakes are defiled by the overt acts of men and women everywhere.

The stigma which rests upon our so-called western civilization, is the utter indifference to the value of human life which we find in evidence everywhere. We are now in the thralldom of a white slavery, one manifestation of which is the utter disregard we have shown for the health of our people by the indiscriminate pollution of our lakes, rivers and streams. We wantonly defile one of the greatest blessings with which a Great Creator has blessed us—for travel anywhere throughout the world and you will not find anything to compare with our great natural reservoirs of once pure and limpid waters, which now are the fountains from which flow disease and death.

It is a fact that typhoid fever, which is a water-borne disease, as well as many intestinal ailments, of which the sanitarian has no definite statistical data, are wide spread. Certainly typhoid is much more common in America than in the crowded countries of Europe. We have only to turn to the statistics of the mortality of typhoid fever to learn the truth of this statement. The following will serve to indicate the relative conditions as to the mortality of this one disease in some of the principal cities of the United States, Canada and Europe:

TABLE B.—TYPHOID FEVER.

Cities of the United States, bordering Great Lakes, mortality rate per 100,000 of population, 1900-1908, (inclusive).

CITIES	RATE PER 100,000 OF POPULATION BY YEARS.									
	1900	1901	1902	1903	1904	1905	1906	1907	1908	
Ashtabula	7.7	44.9	36.3	49.4	137.1	60.0	38.9	19.0	86.2	
Buffalo	23.5	27.1	33.7	34.6	24.2	24.4	23.6	29.2	20.7	
Chicago	21.1	29.8	45.1	32.1	20.2	16.5	18.3	17.7	15.3	
Cleveland	56.8	34.9	35.5	115.0	49.6	14.9	20.2	18.9	12.6	
Detroit	28.4	20.1	23.5	20.0	17.6	21.2	22.3	28.3	22.3	
Duluth	109.5	74.1	53.7	64.8	54.4	44.7	46.0	41.6	56.8	
Milwaukee	19.3	22.1	15.1	16.8	13.6	22.7	30.5	25.7	17.4	
Niagara Falls	107.9	143.9	130.4	126.9	139.8	181.6	147.3	126.8	98.	
Ogdensburg	55.4	20.4	95.0	54.2	60.9	40.5	87.6	40.4	33.6	
Port Huron	47.0	41.3	61.2	25.2	34.9	14.8	53.8	43.5	19.1	
Sault Ste. Marie..	132.9	92.9	172.9	115.9	52.4	68.6	58.9	16.5	72.9	
Toledo	41.0	32.2	34.7	29.5	37.2	45.7	45.0	36.4	40.1	

TABLE C.—TYPHOID FEVER.

Death rate of nine countries, per 100,00 of population.

YEAR GROUP	COUNTRIES	RATE PER 100,000 OF POPULATION
1901-1905	Scotland	6.2
	Germany	7.6
	Eng. and Wales..	11.2
	Belgium	16.8
1901,1904	Austria	19.9
	Hungary	28.3
	Italy	35.2
1901 (census) ...	Canada	35.5
1901-1904	United States	46.0 (estimated)

Fortunately the cry has gone forth from the suffering public: "‘What must we do to be saved’ from this preventable scourge?" In some cases it has found a sympathetic response from the Sanitary authorities, but, up to the present time, it has not been heard or else it has not pierced the hearts of our so-called statesmen who are too intent on political exigencies to pay any attention to that which is the very strength of the nation, viz., the men and women of today and the children whose lives should be conserved for the sake of our future prosperity. The most of our law makers are more concerned about the raising and breeding of good cattle and the extension of manufactures than they are about this vital question. They are not sensible enough of the fact that the conservation of the lives of our people is of infinitely greater importance.

In some quarters legislators, even in this western hemisphere, have demonstrated the fact that statesmen are not dead—only lost amongst the mass of political briars and weeds which

incumber our legislative halls. No less than four of the provincial governments of Canada have recently placed upon their statute books laws which will prevent the pollution of Canadian rivers and lakes by raw sewage and factory waste. In these provinces the truth has been recognized that all bodies of fresh water were given for man's use, not for his abuse. These laws will not produce an immediate change in the present unsatisfactory sanitary conditions, but sooner or later the effects will be noticeable and the results from a hygienic as well as from an aesthetic standpoint, will be salutary.

Of course, it cannot be expected that were every town and city to treat their sewage effluent so as to render it non-putrescible and non-pathogenetic there would be assured to all consumers of lake and river waters supplies that would be guaranteed pure. It can be stated, however, that with the removal of all gross material from sewage and its subsequent partial purification and sterilization, the much vaunted grossly abused, so-called "‘natural purification’ by dilution method" will give infinitely better results. At present, the claim that an all-wise Province will do all the work thrust upon Him by engineers and municipal authorities, and, also, by some sanitarians, is a blasphemy as great as civilized (?) man ever perpetrated. For it is safe to say that this failure of the dilution method is clearly demonstrated in the sixty million dollar experiment of the Chicago Drainage Commission, which has, to be sure, succeeded in developing power but certainly has miserably failed in demonstrating that even by using as much water as flows over the American falls at Niagara, their sewage and factory waste has been disposed of either efficiently or in a sanitary manner. There is no question that the system adopted has minimized the danger of the pollution of the city water supply, but, it cannot be said that it has solved the more difficult one: of how to dispose of the sewage and factory waste of that city.

In Canada, sanitary authorities have been directing their attention to the prevention of the pollution of waterways and their tributaries. At the present time; four of the provinces of the Dominion have made it impossible for municipalities to continue the defiling of our rivers and lakes by making them the receptacles of untreated sewage. Notwithstanding our small population and vast extent of territory, we realize the necessity thus early in our national history, of protecting the lives of our people and conserving the beauty of our lakes and rivers. The fact that the legislatures of Ontario, Manitoba, Saskatchewan and Alberta have placed upon the statute book, laws along the lines just indicated, is proof that the fact has already been brought

home to the people of these important provinces, that "nature" does not dispose of raw sewage when the dilution method is adopted.

Where international waterways are concerned, the problem is a complex one. The chief offenders are naturally the more numerous towns and cities to the south of the boundary line, although it is simply a difference in degree as regards the quantity of pollution, nothing more; for the citizens of both Canada and the United States are guilty. We, in Canada, however, have taken the stand that municipalities must provide for the treatment of their sewage, thereby lessening the contamination of our pure water lakes and rivers. Health authorities in Canada are unanimous on the question of the prevention of pollution, not only because they hope to secure for municipal authorities pure water reservoirs from which they may obtain palatable waters, but because they believe that municipalities in their own interests should not continue to make these reservoirs the receptacle for raw and untreated sewage, thus wantonly making them the sources of disease and death to many thousands who either innocently or compulsorily use the same.

We firmly believe in Canada that it is a cardinal principle to be observed by all citizens that sewage should be properly and scientifically treated and disposed of; that no one should discharge into any body of water a sewage effluent that is not non-putrescible and non-pathogenic. We believe that this is sound in principle and possible in practice. Further, we believe that, unless municipalities will secure their water supplies from carefully protected upland sources, it will be necessary in most instances to filter the water.

As regards the disposal of sewage by lake and river steamers, we believe that the most stringent rules should be adopted and rigidly enforced by the proper authorities to prevent the indiscriminate pollution of these waters. At the same time, we believe that the water supply should be taken only from known sources that are certified to be pure.

The only way these international waters can be safeguarded and the public protected, is by a co-ordinated movement of our Federal and State or Provincial authorities, and we feel sure that it is the wish of every right thinking citizen of both countries that this great sanitary movement may be successful.

DESTRUCTION OF INTESTINAL ANAEROBES BY OXYGEN. Adolf Schmidt, *Inter-state Med. Jour.*, July, 1912, introduces oxygen by duodenal tube, once or twice daily. 4 liters or more can be introduced without undue distention.

Fracture of the Atlas: Separation of a Fragment, and Its Subsequent Extrusion Through the Mouth

The Unique Case of Dr. James P. White

Reported by ROSWELL PARK

There came into my possession some twenty years ago, perhaps longer, the subjoined statements regarding the nature of a very unusual accident, with still rarer sequels, which befell Dr. James P. White, one of the founders of the Buffalo General Hospital, during the year 1837. In December of that year something happened to the stage-coach in which he was riding, near Batavia, and he was violently thrown, and in such a way as to seriously injure his head and neck. I have not been able to learn any of the details either of the event or of his subsequent symptoms. But this case is not only of extreme interest from the surgeon's viewpoint but peculiarly so to us because of past associations. There is no reason why these documents may not now be reprinted. I regret the impossibility of adding clinical details. However no one now or recently living can furnish them. Nevertheless their authenticity is such as to make it incontestible that the atlas may be fractured and a segment be discharged later through the pharynx, and that the victim of the accident may live for many years without suffering material inconvenience. Those who still remember Dr. White can testify to his unimpaired usefulness and to unceasing activity of his daily life.

The following certificate was published in the Philadelphia Medical News of November 27th, 1886. The original, with Joseph Pancoast's own signature, witnessed by Morris Stroud French, M. D., of Philadelphia, is in my possession. If I recall correctly it was put in my hands by the late Dr. J. B. Andrews. How it fell into his I do not remember.

"An Interesting and Remarkable Accident."

"There came, accidentally, into our possession, a short time ago, a memorandum, signed by the late Joseph Pancoast, relating to a remarkable injury received by the late James P. White, the well-known gynecologist, of Buffalo. The note was as follows:

"A front segment of the atlas vertebra, a little more than an inch on the superior margin, a little less below, with the facette which received the odontoid process. It was in the possession of Professor Granville S. Pattison, to whom it was loaned by Dr. White, to show Professors Joseph Pancoast and McClellan. It is probable that the transverse ligament retained its hold on

the two extremities of the remaining fragment of the atlas, thus protecting the spinal marrow from injury. This bone in possession of Professor Pattison I repeatedly saw and carefully examined; he exhibited it to his class, and it was mislaid or lost. At the request of Professor White, I make this statement of facts. The bone was in our possession in 1838-39-40, or thereabouts. I then understood and believed (since confirmed by conversation with Professor White) that it came from his throat, coming out through the mouth as a consequence of ulceration, the result of an accident while riding in a stagecoach on the morning of December 17th, 1837. The bone was discharged at the expiration of forty-five days after receipt of the injury."

"This statement, signed 'Joseph Pancoast,' records an interesting and remarkable accident which, so far as we know, has never been made public, and of which there are only one or two instances mentioned in literature." (*Medical News*, Nov. 27, 1886).

Comment. The last statement, quoted above from the *Medical News*, is certainly correct in that this was a most interesting and remarkable case, though just what justification there is for the further statement that there are only one or two instances on record I cannot determine. I have made a careful search through the *Index Catalogue* of the Surgeon General's Library, both series, and, unless titles are incomplete or misleading, I find there is not a single duplicate of this case reported. Bayard (*Boston M. and S. Journal*, 1870.) and Sinkler (*Philadelphia Medical Times*, 1875.) both report cases of fracture of the odontoid process with recovery, while every case of fracture of the atlas, if one may judge by the title, has sooner or later proved fatal. Through the annual volumes of the *Index Medicus* I have not taken the pains to search. At all events Dr. White's case was of the most extreme rarity, and it is most unfortunate that better details are lacking.

Of his condition during the forty-five days previous to the extrusion of the fragment there is no account, neither is there of the time elapsing before his restoration to his usual activity; but inasmuch as he died in 1881, having passed the subsequent part of his life in a most active professional career, it is legitimate to conclude that he suffered little, if at all, from the consequences of his injury.

NEARLY COINCIDENT ECLAMPSIA OF MOTHER AND DAUGHTER. M. H. Newman of Cody, Neb., *Med. Review*, Oct., 1912. Daughter, aged 20, 2-para, post-partum, July 3, urine contains trace of albumin. Mother, 7-para, aged 36, ante-partum, July 4-6, moderate albuminuria. Both recovered.

Address Before the Optical Society of the State of New York, in Convention at Buffalo, June 17th, 1912

By CHARLES F. PRENTICE, M.E.

New York City

President of the New York State Board of Examiners in Optometry

Mr. Chairman and Fellow Members:

My attendance at this Convention is one of serious duty rather than one of pleasure. Duty, because I have recently expressed opinions in print which surprisingly few of you have indorsed. Evidently there has been misconception of my motive and opinions, but which I believe to be due to subsequent editorial criticism in an unfriendly trade journal.

Therefore I am here to vindicate my position, which, indeed, is a trying one because I am expected to merit the approval of my superiors on the one hand, and of my friends among optometrists on the other.

As a subaltern state officer, it is my first duty to uphold the rules and regulations of the Regents and to respect the judgment of the Directors and Faculty of Columbia University, and for whose established optometry courses I am in a large measure personally responsible.

My own zealous guardianship is, therefore, due to personal interest in some facts which are being generally lost sight of, and which indeed some men in this state are disposed to discredit, possibly through fear that there will not be glory enough for all. Therefore, without any modesty in making liberal use of the personal pronoun, or fear of honorable contradiction, I shall here mention them, lest in my absence it be disputed that I instigated legislation which eventually led to the enactment of the New York State Optometry Law through Mr. Arrington's ability and the support that was given to it by the "Old Guard" and others.

Don't misunderstand me! The honors are all theirs and yours. I am only charged by our medical opponents with the responsibility, and I must, therefore, be the victim for the consequences if they are bad. However, I have worked hard to make them good, and therefore ask your aid.

At the New York Convention in 1908, I suggested the state syllabus, which was then thought to be too high, and yet it was subsequently recommended by the optometry board and approved by the Regents. Later I used my personal influence with the First Assistant Commissioner of the New York State Education Department, who caused the optometry courses to be established in Columbia University.

There are a number of men here who will substantiate these statements, and as you had approved all of these things, it was natural to suppose that you would place your trust in me to advise against anything being done to undermine the established integrity of optometry in this state. Am I right or wrong? (Applause).

Well then! Schemes have recently been advocated to enable optometrists to obtain the degree of Doctor, and which are at best only silly attempts to circumvent established usage and the recognized supervision by the state.

Optometrists who support such schemes are disloyal to the state that has really licensed them to practice a drugless therapy through the use of lenses. They do not realize that their encouragement of a college in another state to issue a doctorship will divert degree-hunting students from attendance at Columbia University, and that the state will thus eventually lose university support of the optometry law.

Moreover, even though a foreign college were not involved, Columbia will probably suppress its optometry courses through medical influence and natural disgust for a class of men who fail to appreciate the true value of academic standards.

Imagine my humiliation upon receiving the following as part of a letter from the Director of the Optometry Courses in Columbia:

"Don't you think now that we are willing to take care of the optometrists, they should advertise in a reasonable way without bringing harm to the cause?"

Gentlemen, this was certainly a subtle reminder of the ingratitude of certain optometrists, and I had to receive it and suffer the reprimand for them, the men who malign me.

Unfortunately some very competent and respected optometrists have unwittingly become converted to the opinion that they are justified in using the title "doctor" through having graduated from some unregistered college. However, such a degree is not recognized in New York, and I am confident that such men will henceforth discontinue the practice.

Every intelligent man knows that the caruncle of a cock does not make him the chanticleer, nor does the possession of a fiddle create the virtuoso. Then why should optometrists make themselves ridiculous by clambering for a degree which is as yet not taken seriously by the Regents of the state? Some people may be deceived by psuedo degrees or counterfeit money, but we should not all strive to adopt such expedients because some men may advocate them.

Lunatics do not know or admit that they are crazy, and optometrists who fail to appreciate the principle upon which academic degrees are acquired in New York, similarly do not realize their own folly in calling themselves doctors. Why did they not first consult the proper authorities at home before promulgating their false conceptions among misinformed men who support them? Because they are carried away with the belief that the title "doctor" is an economic and not a scholastic term; because they, with equally mis-placed confidence, believe that the title "doctor" will bring them dollars instead of doughnuts.

Some of these men have told me with genteel complacency, that they would not blame me for deserting them. Why? Because they think I am antiquated, and have served their selfish purpose long enough. They are now simply ready to repudiate their benefactor.

For seventeen years I have suffered the general censure of learned medical men, but let me tell you that I did not silently suffer it for a band of cads, pikers or peddlers; but for a principle, which is now in jeopardy. It is regrettable indeed that there are optometrists who lack the required moral rectitude to live up to Governor Hughes' admonition to "preserve a proper *esprit de corps*." Little did the Governor then suspect that he might be casting pearls before swine.

Rest assured, gentlemen, that it takes something more than self-interest to bear the abuse of one's intelligence and moral character by learned medical men while remaining loyal to what they have considerably called "bad company."

Of course, there are many conscientious and able men in this society who have my greatest respect, and with some of whom I have for many years had a most intimate and friendly acquaintance. It is to them I now appeal for support, in order to prove to interested communities that we are not all of the deadly stripe painted before the Regents, the Directors of Columbia University and the medical profession at large.

It is for the people and the better class of optometrists that I preached the doctrine that the practice of optometry shall be founded upon optical knowledge, but not with the assumption that they should never be required to qualify at least to some degree in medicine.

Now, as to my recently published utterances respecting the education of future eye practitioners, I will repeat my opinion that the public will receive the best, the most comprehensive eye-service from those practitioners who have at least as much knowledge of medicine as they are now required among us to have in optics. Even if only this should result, their medical know-

ledge will be as far from being complete as their required knowledge of optics, which according to the state syllabus, is specifically limited. This is why I have for years compared optometry with dentistry, on belief that "all future practitioners of optometry should be graduate physicians."

* However, it is not your business, nor is it my business, to say how such medical knowledge should be injected into optometry. There is not an optometrist in the land who is sufficiently versed in medicine, either by collegiate education or amateur experience, to prescribe the required scope of medical education that should be given to the more advanced practitioner of optometry. The optometrist having such presumption would be rudely encroaching upon the medical prerogative.

I have simply asserted my belief that medical education should be included in the optometry courses of future eye practitioners, while expecting fair-minded and competent medical authorities to determine its limitations. Moreover, even should this eventuate, established optometrists will not suffer through such requirement any more than those men who have failed to qualify in theoretic optics as now required by law.

Gentlemen, you must be prepared to raise and not to lower the standard of education. Remember, I am only asking you to be prepared to show a disposition of fairness to arbitrate among collegiate men, to concede that your standard may be improved upon, so that when the time comes you will be prepared to give and take in the effort of commendable uplift. You must put yourselves on record as being opposed to the tactics of "bad company."

Put yourselves in a position to honorably arbitrate when your optometry courses in Columbia are threatened with suppression. You should be progressive, not retrogressive. Nor will standpatism suffice, because you must not abide in the faith that Columbia University is going to stand pat for you very long. The opinions of learned medical men will have far greater influence with the directors of Columbia University than those of self-styled "optometric doctors" who are already filling them with disgust. Columbia is not going to stand sponsor for their irritating and wanton behavior.

The opinions of men in Pennsylvania, Ohio and other states are not altogether applicable in New York, where we are under supervision of the Regents, who look at things from an academic point of view and who are not interested in the regulation of selfish commercialism, but of ethical professions. Show also the Regents that you are worthy of their respect.

Where among you are the men who do not desire to support the Regents, the Directors and the Faculty of Columbia University? And what better policy than is here outlined can you advocate to prove your loyalty to these institutions in the state? I know you will need their friendly support even to a greater degree in the very near future.

Is this not sufficient warning from one who, in the very nature of things, must be better informed on the inner situation than the critic who is most popular for his use of a slanderous tongue? Support my policy, and you will be altruistically helping the cause of optometry, and incidentally yourselves through gaining the respect of learned men. No greater harm can come to you than to myself by such action. You will certainly, from a proper appreciation of my past services, lend a deaf ear to the critics who have set themselves up as the supreme judges of criminality in their own court. Recently advocated retrogressive schemes have compelled me to reveal my own unbiased opinions, and simply because I can also no longer stand sponsor for men who are recklessly endangering the established integrity of the optometry law of New York. These men have precipitated a crisis so far-reaching in its detrimental results that I am confident that you will approve of my loyal performance of duty in defending the state's interest in optometry.

Our past accomplishments should commend themselves to every intelligent observer. We have closed the door against a continuance of postulate optical practice among optometrists. As a result, we have only had thirty-five men, qualified by examination, enter the field of practice during the past four years; whereas, if we had not had an optometry law we should undoubtedly have had three hundred or more additional incompetents working among us today.

Eighteen years ago I suggested legislation which, through the efforts of others in twenty-seven states, upholds the constitutional right of optometrists. At that time I had no other object in view.

Eighteen days ago I made another suggestion—the one repeated to you today—which, if unheeded, may cause us to lose much that we have gained in the State of New York.

We have simply reached another crisis wherein my judgment is again criticised; yet you, as well as the Regents and Columbia University, have in the past approved it, and a few of you have profited exceptionally by it; notably examined men in New York, some of whom are making my position very difficult.

Therefore, it ought to be fair risk to again follow my advice, now that you have heard the reason for it.

Note by the Editor: It is scarcely necessary to say that the publication of a communicated article does not imply editorial agreement. In fact, as a general policy, we give the preference to articles which present minority views, lead to critical investigation and thus, whether themselves right or wrong, ultimately tend to establish the truth. For the same general reason, we feel that it is proper to publish articles, occasionally, by men not themselves members of the medical profession. The open-minded, judicial attitude of according at least a respectful hearing to both sides of any controversy, whatever our preconceived views may be, is really the highest ethics. We are authorized to state further that the acceptance of the present article has been recommended by others, including the author of the next paper. We therefore ask the careful reading of both papers, without prejudice, and such further discussion of the problems presented, as may occur to our readers.

Is Optometry the Practice of Medicine?

By F. PARK LEWIS, M.D.

DOES the adaptation of glasses for the relief of symptoms constitute the practice of medicine, or does it not? If it does, it is the work of the physician. If it does not it is the work of the mechanician.

The question involved is not one having to do with the technical difficulties of glass fitting, because adequate training in optics and practical work in refraction will make a capable man an adept without any knowledge whatever of the anatomy of the human eye or of the intricacies of medicine. On the other hand no matter how complete may be an education in medicine it will not make a skilled refractionist until he shall have been trained in the physics of light in its effects upon the human eye.

It is necessary only to understand how profound is this influence to realize that this is not only not work for a mere mechanician, but it often demands for its successful application the widest knowledge, the broadest medical training, and the most acute and logical reasoning on the part of the trained physician. We are only now beginning to understand that *light* is one of the essentials of *life*, and that through the eyes by means of a most complex series of adjustments it produces actual changes in the cortex of the brain which make us conscious of the outside world. Let us disarrange these sensitive adjustments, as we may at any time do experimentally by placing prisms, or spherical lenses of unequal strength, or wrongly adjusted cylinders before the eyes, and we can produce symptoms of illness as

immediate and as profound as those which would result from a dose of a toxic drug. It is now known that the changes of color in the chameleon, affecting as they do the entire body, are produced through the sympathetic nervous system by way of the eyes, and when the eyes of the animal are destroyed, no such alterations of color are produced. It is within the experience of every careful ophthalmologist that the endeavor to blend the images when the eyes are organically unlike will often result in nausea and vertigo, while a cold sweat and a profound exhaustion, are the indications of a real sickness which the confusion of sight produces. There is no careful internist who will be satisfied that his treatment is complete, especially in a neurotic patient, until he is assured that the eyes are working in harmony and without strain. He knows how multiform are the reflexes carried by the long bundle of nerve fibres extending from the nucleus of the 3rd nerve, under the fourth ventricle, until they are lost in the medulla. He has seen chorea relieved by the cure of hyperphoria and has witnessed the disappearance of psychosis coincidently with the relief of a muscle strain. It is no longer a subject of doubt but a matter of daily observation that the eyes through the brain are the most prolific source of general disturbances. With normal vision the eye ground may indicate serious constitutional disease. The condition of the retina may give the first evidence of lesions in the kidney, in which the promptitude of recognition may mean the saving of life. Rapid increase of presbyopia is an early symptom of glaucoma, and the early diagnosis of a glioma in the eyes of a child (so like a cataract to the untrained) will save him from the horrors of a cancer involving his entire head. To recognize these the refractionist must be a physician.

On the other hand the doctor who undertakes to prescribe for eyes must be adequately trained, not only in the physics of light, but in the exceedingly difficult work of refraction. This cannot be learned in a few weeks nor can it be academically acquired by a course in a correspondence school. It must be patiently studied in the clinic under the eye of a good teacher. It is by no means a mere mechanical matter. After having determined the refractive value of each eye, both in the long and short range of vision, having ascertained the muscle balance, having eliminated the latent conditions which are frequently found in the most difficult cases, having determined whether the marginal lid irritation present may not be due to some nasal obstruction or some bodily habit, he arrives at the most difficult and most important point, to which all of this leads, the logical treatment

which must follow. Shall it be the local application of some medicinal substance to the lids?—or the internal administration of a drug? or the use by hypodermatic injection of one of the sera which will raise the opsonic index? or the relief from ciliary strain by correcting refractive errors, or by the use of a prism? or should the use of the eyes temporarily cease, and the eyes be given rest? The right prescription of glasses requires fully as discriminating judgment as does a determination of the static refraction, and the experienced ophthalmologist will never follow a rule of thumb. His success in the most difficult cases will depend on the skill with which he departs from established usage. To be able to do this satisfactorily requires a most careful and extended training in ophthalmology as well as in medicine. It is not to be wondered at, therefore, that men who have been graduated in medicine in a course in which ophthalmology has been merely touched upon, and who yet have the temerity to undertake to practice a specialty which has grown into a distinctive branch of the profession, make refractive blunders which “though they make the unskilled laugh cannot but make the judicious grieve.”

In an analysis of the situation there are two objects to be considered—the best interests of the patient which are necessarily first, and for whose benefit both optician and ophthalmologist exist, and just and fair treatment of both the latter. To attain the former there should be an official assurance of competency on the part of those who treat the eye whether with glasses, drugs, or what not. This could be determined by the issuance of a degree in ophthalmology given only after demonstrated proficiency. A little learning is not only dangerous but misleading. The refractionist must first be a doctor. He need not be an expert in abdominal surgery nor in orthopaedy, but he should learn the interrelation of the part with the whole, as of the whole to the part. Per contra, is it too much to exact that the optometrist shall be a mechanic as well as a physicist? In their struggle to be quasi doctors very few of the opticians have taken the trouble to acquire any degree of proficiency in the work which primarily is expected of them, i. e., the making of glasses so that they shall be properly ground and correctly set, and the adjustment of frames so that they shall easily, firmly and comfortably maintain their position on the face. The skilled making of lenses is a profession which has before now attracted the attention of men of the best ability. It demands for its successful prosecution a knowledge of optics and of mathematics. In a complicated prescription it is of first importance that the

refractive indices of the lenses combined shall be known in order that the effect which they shall produce, may be calculated in advance. In the decentering of a lens a prism element is introduced the effect of which must be estimated. The work of the optician is therefore wholly different from that of the optometrist.

Can the latter without a knowledge of brain physiology measure the visual field and draw logical deductions from his findings? Can he as the most expert and well trained ophthalmologist can not, always determine the true refraction without the use of a cycloplegic? Can he, without the use of a mydriatic discover the beginnings of cataract in the lens margin? Can he, without some pathological experience be assured that the redness of the lids is due to eye strain and not to the infectious and dreaded trachoma? If he cannot, must not his examination at best, be a partial and misleading one giving an unwarranted sense of security to the credulous patient who is quite unable to measure the medical limitations of one who chooses to call himself a "Doctor of Optometry?" Is it too much to hope that all of those who profess to treat the eyes whether doctors of medicine or optometrists, shall be required by the state to give evidence of a practical and theoretical knowledge of the subject in all of its branches so that at least the minimum requirement of "reasonable knowledge and skill" shall be met?

It would seem that an *entente* could be effected by which not a *little* medicine but a *real* medical training shall be the basis of the education of the refractionist and that the maker of lenses shall be at least as well equipped for this work as is the dispenser of drugs for his.

ABSTRACTS

HEREDITARY PIGMENTED NAEVUS. Dr. Albert Soiland of Los Angeles, *Calif. State Jour. of Med.* Nov., 1912. The cuts, kindly loaned by Dr. Philip Mills Jones, Secretary of the Society and Editor of the Journal, show the result of X-rays, in a month, pushed to the production of a slight dermatitis.

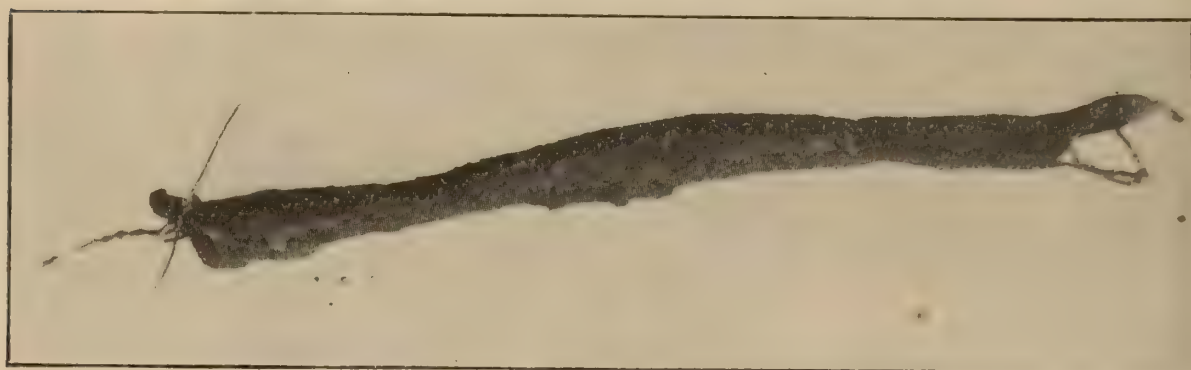
TUBERCULIN IN PHTHISIS. John Guy, *Glasgow Med. Jour.*, No. 3, 1912, believes that the opsonic index is useless, that tuberculin can be administered with comparative safety if the temperature is watched, and that there is no general clinical evidence as to the superiority of any particular form of tuberculin.

OCHRONOSIS. Beddard and Plumtre, *Quarterly Jour. of Med.*, page 505, 1912, report a case in a man of 73 who had used car-



bolized oil for forty years for leg ulcers. He died of pneumonia. About 30 cases have been reported, 14 in connection with alkaptonuria, 9 with phenol, 7 not stated.

CAST OF URETHRA AND CICATRIX DUE TO SILVER NITRATE: INSANITY. Dr. Victor Cox Pedersen of N. Y., in the *Critic and Guide*, Nov., 1912, reports the case of a man who, expecting to marry and wishing to rid himself of gonorrhoea, asked a druggist for a bougie to burn out the urethra. A stick of silver nitrate was given him. The deep urethra was button-holed to obviate the resulting urinary obstruction. Under frequent irrigations of weak permanganate, sepsis was avoided and a cast of the anterior urethra, four inches long was passed in four days. Gonococci persisted in the discharge for some time. A dense but not impermeable stricture involved a corresponding



length of the urethra. From disappointment at the breaking of his engagement and on account of syphilis, the man became insane. Dr. G. A. Smith, Supt. of the Central Islip State Hospital, reports the case as one of dementia praecox, of the paranoid type but states that, after eighteen months, urination is free without instrumentation. Through the courtesy of Dr. W. J. Robinson, Editor of the *Critic and Guide*, the accompanying illustration is reproduced.

CONGENITAL ABSENCE OF CAECUM AND ASCENDING COLON. P. L. Mummery, *Annals of Surg.*, page 844, 1912. The lower four inches of the ileum was dilated and joined the right portion of the transverse colon directly, without an ileo-caecal valve but with a rudimentary appendix. No inconvenience due to the anomaly. 5 similar cases in literature.

ACUTE PRIMARY GASTRIC TUBERCULOSIS. Dr. Norman P. Geis, *L. I. Med. Jour.*, Sept. 1912, presents the following case history: A man 37 years of age in January, 1909, presented himself with a tumor of the mediastinum. His symptoms were difficulty of

breathing, high pulse rate with palpitation of the heart, dizziness and loss of strength and weight. Finally after consultation this tumor was thought to be a gumma. It disappeared under the iodides in six months. He remained well till August, 1911. On August 1, 1911, he arrived in Mexico and remained there till December 1, 1911, coming to me on the 7th of this month. After being in Mexico one month he began to show signs of stomach distress after eating, with gas and a full feeling. This kept up till October when vomiting was added. This vomiting took place one-half hour after eating. This continued during the month so that he restricted his diet to liquids and semi-solids. During November he vomited after each meal if he took more than eight ounces of food at a time. Pain began this month to be continuous when the stomach was empty. Food would relieve the pain for about an hour. His diet is malted milk and once a day a poached egg. The pain is in the region of the pyloric end of the stomach and the duodenum. He never vomited blood. Constipated. Loss 33 pounds in four months. A doctor in Mexico said he had a dirty stomach and the X-ray showed a spot in the liver to the left of the median line. In Mexico all meat is eaten the day it is killed. There is a distinct rigidity of the rectus on the right upper end with an indefinite mass under same. Some tenderness was also found. Test meal gave HCl 5 and total acidity 13 with some blood and only half of the meal returned. No blood in stools. Methylene blue test of urine positive on two tests. My diagnosis was cancer of the gastro-duodenal junction or an ulcer of the same with stenosis in either event. Operation—The first 5 inches of the duodenum was enlarged to the size of a banana and hard to the touch. Four-fifths of the stomach was involved in a hard mass that was $\frac{3}{4}$ -inch in thickness. Owing to the man's poor condition, a posterior no loop gastro-jejunostomy was considered the only operation of choice. It was difficult to find a clear place in the stomach for my union. It was necessary to bring the summit of the greater curvature of the stomach down to get this free space. A section of the stomach was removed for examination.

He made an easy recovery and left the hospital in two weeks. One month after operation he had gained 6 pounds and was free from pain and vomiting. Pathological report—Tuberculosis of the mucous membrane of the stomach. No syphilis. Cancer not found but was not excluded for full section of stomach was not turned over to pathologist.

SPORTRICHOSIS.—Hamburger. (*Journal Amer. Med. Assn.*, Nov. 2, 1912.) reports a case and states that it is highly probable

that this is a wide-spread, prevalent disease, particularly in country and farming districts, and that many cases now diagnosed as tuberculosis, syphilis, glanders, blastomycosis, actinomycosis, etc., are really unrecognized sporotrichosis.

The disease occurs more often in men between 15 and 45, usually in country districts. Ordinarily, there is a history of trauma. The incubation is slow and there follows a slowly progressive, ascending infection, following the course of the deep lymphatics, with the production of characteristic small, hard, round, subcutaneous nodules, which break down to form cold abscesses or cutaneous ulcers.

The disease lasts from three weeks to eighteen months, with little or no pain or temperature and little or no effect on the general health.

The *Sporotrichium* appears as a growth on 2% glucose agar, at room or incubator temperature, in eight days. It is a branching, septate mycelium with pear-shaped spores.

WOUNDS INFLICTED BY THE MODERN RIFLE. R. G. Heiner, M. D., United States Naval Hospital, Annapolis, Md. *Maryland Medical Journal*, Oct., 1912. Before the Spanish-American War it was said that the long range rifle would be a more humane instrument of warfare, as on account of the small cross section of the bullet and its high velocity it would only damage tissues actually in its path, leaving a small canal, the sides of which would fall together in good position for healing, and there would be no infection on account of the bullet being sterilized by the heat produced in its rapid flight. Consequently, if no important structures were in the path of the bullet, a rapid and complete recovery was to be expected.

Experience has proved that our modern high-power rifle is very destructive, producing far more extensive injuries than the old-style weapon.

The explosive effect caused by the high velocity was not considered, and experiment has proved that the temperature of the projectile is not raised enough to kill any germs that may be lodged on it.

The modern rifle is sighted up to 3000 yards, but is generally used at a range of under 1200 yards; although, of course, a great many wounds occur beyond that distance.

In wounds received at ranges of under 500 yards, the explosive effects are noted on all tissues; the closer the more severe. At very close ranges even muscles are pulpified, the bullet carry-

ing with it a cone shaped mass of tissue, with its apex corresponding to the wound entrance, and its base sometimes three or four inches in diameter, corresponding to the wound of exit. Traumatic aneurisms are caused in the adjacent vessels and the shock is transmitted to the entire member. Bones are pulverized, frequently the whole shaft of a long bone; and in case of solid organs, as liver, kidneys, brain, etc., complete destruction occurs. At close range brain wounds are 100 per cent. fatal.

Between 500 and 1200 yards the wounds are more likely to be perforative, and the damage lies only in the track of the bullet; the nearer you get to 1200 yards the more clean cut the perforation.

Over 1200 yards, when the bullet loses its steadiness and begins to wobble, you have another entirely different class of wounds. The bullet still has enough velocity to perforate and is wobbling, tumbling or traveling side on, on account of which it produces extensive lacerations to soft parts and shattering of bones, but there is no explosive effect.

REPORT OF FOUR CASES SUGGESTING STATUS LYMPHATICUS. J. A. Goodrich, M. D., Des Moines. *Ia. Med. Journal*, Oct., 1912. The death of four children in one family within a period of three months and four days and all occurring under similar circumstances presented a condition of more than ordinary interest.

The father of these children is alive and well; the mother died of heart and lung affection, in October, 1910, some eighteen months previous to the death of the first child. In January, 1912, the father again married. In the father's family tree, we find the death of eight of his brothers and sisters, all under nine years of age; three from Scarlet Fever, one Erysipelas, one Flux and three unknown. On the mother's side we find nothing of unusual interest.

Case 1. April 8, 1912, Wyetta, aged four, suddenly died. For a few weeks some impairment of hearing had been noted, and her breathing had been somewhat difficult and stertorous, but this was ascribed to a cold and was treated with home remedies. About a year previously this child was afflicted with diphtheria and was given 5000 units of antitoxin with recovery, but she seemed somewhat more sluggish after this time. During the few days before her death this apathy was more marked. She did not care to play, was afflicted with enuresis, nocturnal and diurnal. At about midnight the night before her death she aroused her father by an attack of choking followed by vomiting, after which she slept till morning. On arising she was noticed to have a pallid look.

She again vomited and was put back to bed, and a physician was summoned, but Dr. Kelley found her dead on his arrival.

Case 2. Eight days following the death of Wyetta, Cecil, a bright little two-year old girl fell down the cellar stairs, fracturing her left clavicle. This I dressed that evening. At this time she seemed bright and sat up in bed while I applied the dressings. The following morning at about seven she arose and seemed quite well, eating only a little cake for breakfast, however. Soon after eight o'clock she was seized with a spasm, which was soon followed by another. Then she said she was hungry and was given some strawberries, of which she ate quite heartily. She was then put to bed and was soon asleep. This did not last long however for she was soon heard screaming. By the time her mother reached her, she was dead.

Case 3. June 7, Walter, aged five and one-half years, died just as suddenly and mysteriously as did the others. Some two weeks prior to this time he, like Wyetta, was noticed to be able to hear less acutely than usual. His tonsils and adenoids, as well as all superficial lymphatic glands, were noted to be hypertrophied. Syrup of ferrous iodide was given in full doses. On this morning he had seemed to be in his usual health and had gone out into the garden and was picking potato bugs off the potatoes when he was called because the sunshine seemed to be rather hot. He went into the house and lay down on the bed but said he was not sick. Soon after this, on going to his room he was found dead. One arm had been raised over his head and a little bloody froth exuded from the mouth. His face, as did the others, bore a mottled look. This child had experienced a little excitement earlier in the day. When his sister had returned from school with her promotion card, this being the last day of school, he became much interested and could talk of little else than of what he would do when he entered school this fall.

Case 4. On July 12, just three months and four days from the death of Wyetta, Josephine, aged seven, the last of the family of four happy and contented children, was stricken. Since the death of Cecil and more especially of Walter, she had been watched very carefully, not only by the family but by physicians as well. She, like Wyetta and Walter, suffered with enlarged tonsils, and during her last few days of life the warning deafness appeared. On two or three occasions she was seized with spells in which she thought she was being choked, but recovered from them. In one of these seizures she said, "Oh, my God, someone is choking me." She then turned cyanotic and sweat freely. After recovery she asked if her mother had seen all the people around her.

During the night previous to her death, she had become greatly alarmed because of the thunder storm then raging, but after its cessation, she slept quite well. At seven her father, on going to work awakened her and asked her how she felt, as was his custom. She replied "all right," and returned to sleep. Some two hours later she arose and went to the living room and started to dress. Her head was then noted to be inclined on her chest, and her face mottled and cyanotic. Attempts to revive her failed, and death followed immediately.

(GLUZINSKI'S) METHOD FOR DETERMINING THE CHARACTER OF A PYLORIC STENOSIS WITH ESPECIAL REFERENCE TO THE TRANSITION OF THE ROUND ULCER INTO CANCER. The method in question was first described in detail by the author in the *Gazeta Lekarska* (1901 Warsaw, Russia) and in Vol. X of the *Mitteilungen Aus den Grenzgebieten der Medizin und Chirurgie*.

Its object was the early recognition of the character of a pyloric stenosis, i. e.: Whether it is caused by a round ulcer or cancer and eventually whether one is dealing with just a simple ulcer, or an ulcer becoming malignant.

Principal conclusions detailed in former works:

(1) Ninety per cent of gastric ulcers are situated in the pyloric region.

(2) An ulcer in the pyloric (not the cardiac or fundus) region which produces stenosis is almost invariably accompanied by an abundant supersecretion—the result of acid catarrh.

(3) Statistics obtained by autopsy show that 86% of gastric ulcers present evidence of carcinomatous metaplasia; clinically, however, this can be demonstrated more frequently. The importance of early diagnosis is therefore self-evident.

(4) In pyloric obstruction the result of a simple ulcer, the removal (resection or gastro-enterostomy) does not relieve the supersecretion which may instead continue for quite a while (months, and at times, years).

(5) A pyloric ulcer which produces stenosis and is beginning to undergo cancerous change, may be recognized by a decrease in the aforesaid supersecretion, (harbinger of the future catarrhal state of the mucous membrane) as well as by a certain diminution in the secretion of gastric juice—secretory insufficiency.

(6) To demonstrate this decrease of supersecretion (in cases of established stenosis), the gastric function is tested three times within the course of one day. Examination is made of

the contents of the early morning stomach, that after a test breakfast and finally a test dinner.

"My observations have proved," says the author, "that, if in pyloric stenosis a supersecretion be found constantly after the three tests, we are perfectly justified in pronouncing the same a simple ulcer. Should there be found however a diminution, or total absence of free hydrochloric acid following any of these tests, we have cause to believe that in such a case, carcinoma has made its appearance. This rule holds good even if tests made at other isolated times, have shown a sufficient hydrochloric acid content. If necessary this examination should be repeated for a few days.—*Vermont Medical Monthly*.

NICOTIN IN TOBACCO. *London Lancet* (April 6th, 1912) By a new method of analysis, the *Lancet* finds a much smaller percentage of nicotin in tobacco than has heretofore been supposed. Havana cigars contain .64% nicotin, British, 1.24%. Virginian and Turkish cigarettes contain 1.38 to 1.60% nicotin, Caporal, 2.60%, and average pipe mixtures 2.85%. The percentage of the nicotin-content of tobacco that goes into the smoke, and is drawn into the mouth is as follows:

"Cigarettes: Virginian 3.75 to 8.50%; Turkish 37%; Caporal 84%; pipe-mixtures, smoked in cigarettes, 79%; pipes 77 to 92%; cigars 31 to 83%."

NEW DRUG FOR CARCINOMA.—Letulle (*Bulletin de L'Academie de Medecine*) presents a report concerning a compound of arsenic and phosphorus with albumin prepared by Gnezda and designated as arphoalin. •It is a brown, tasteless, insoluble powder, and contains 6.3 milligrammes of arsenic and about 6 milligrammes of phosphorus to every gramme of albumin. Applied locally to ulcerated or suppurating tumors it promptly arrests hemorrhage and pus formation and removes odor. Microscopically, Gnezda found that epitheliomatous cells under its influence underwent rapid fatty degeneration, while the stroma soon showed partial necrosis, with gradual healing of the lesion thereafter. Internally, the dose used was 0.25 gramme, an hour after one, two, or even three meals, according to the patient's general condition. Under this treatment rapid necrotic softening of a carcinoma of the neck in a man was noted as well as healing of a recurrent carcinoma of the left cheek in a woman of eighty-seven years. In the latter case the drug was also applied directly to the ulcer for a month. No further recurrence had been observed two years later.

HEREDITY. So much has been written about the contrast between the descendants of Jukes, the criminal, and Jonathan Edwards, the respectable Yankee, that we reproduce the following table from the *Medical Times*. After all it is questionable how much is heredity and how much environment.

Max Jukes.
(Born 1720.)

1200 descendants identified.
300 in the poorhouse.
300 died in childhood.
440 viciously diseased.
400 physical wrecks.
50 notorious prostitutes.
7 murderers.
60 habitual thieves; averaged twelve years in jail.

Jonathan Edwards.
(Born 1703.)

1394 descendants identified.
295 college graduates.
1 Vice-President.
3 U. S. Senators.
12 college presidents.
65 college professors.
60 physicians.
100 clergymen.
75 army and navy officers.
60 prominent authors.
100 lawyers.
80 public office holders.

Recently, we have seen a similar, though less detailed abstract between the illegitimate and the legitimate descendants of a Revolutionary soldier. But in the genealogy of the G. Family is mentioned an illegitimate branch in which the G. ancestor was selected from three possible propositi because the baby was thought to resemble him more than the others. Yet the genealogy ascribes fully as high a respectability to this putative branch as to the legitimate family.

AFTER EXPOSURE TO X-RAYS, A TRANSITORY LEUCOCYTOSIS is frequently observed, differing from the leucocytosis following infection in that the eosinophiles only are increased. Aubertin and Giroux, in *Presse Medicale*, July 13, 1912, report a case in which the eosinophiles reached 65 per cent, the other cells remaining normal in number. Frequent or prolonged exposure causes a destruction of eosinophiles.

THE COMMONER CONTAGIOUS DISEASES OF CHILDHOOD.—Herrman, (*N. Y. Med. Journal*, August 17, 1912) discusses the means by which these diseases are usually spread. There is something attractive in the idea of air-borne infection but the evidence is all against it. Air and sunlight quickly destroyed the virulence of the pathogenic micro-organisms. Children with different contagious diseases may be treated in the same ward with impunity if contact is prevented by means of the so-called "boxes" and if certain precautions are observed by the nursing staff at the same time. The danger from rooms previously occupied by persons with contagious disease is much less than is generally believed. In New York City alone over \$50,000 is expended annually in disinfection and about forty per cent. of this amount for measles, when practically all sanitarians agree that with this disease at least, no disinfection is necessary. In Providence the local health officer, Doctor Chapin, has for some time ceased disinfecting except in special cases, with no noticeable increase in the morbidity of these diseases. Seven weeks' trial in New York gave a like result. The danger from desquamation has been overestimated. Mild unrecognized "missed" cases are responsible to a great extent for the spread of contagious disease. The importance of the role played by the "carriers" cannot be overestimated. Persons, not things, spread disease. Isolation, disinfection, improved medical, school inspection and special hospitals cannot have a marked influence on the reduction of morbidity. This can be accomplished only by a temporary or permanent immunization against these diseases.

MINERAL SPRINGS AND THE NEW ELEMENT, NITON. Dr. L. K. Hirshberg, of Johns Hopkins, (*Scientific American*, April 20, 1912). Thomas, Ramsay, Crookes and Rutherford, found traces of radium in the waters of many mineral springs. Then followed the discovery by Sir William Ramsay, not only of the fact that the wonderful properties of radium were due to the gas niton, of which it contains seventy-five per cent, but also that the curative value of the spring at Bath, England, was due to the niton its waters contained.

We are thus furnished with an explanation for a phenomenon which has given rise to considerable speculation, viz., the fact that mineral waters that are prepared artificially, even though the formula of the bona fide spring is reproduced qualitatively and quantitatively with the utmost care, fail to produce the same effects as the waters of the original spring, especially when used at the spring itself. Even the greater activity of freshly drawn waters may find its explanation in the fact that while niton, like

helium and argon, is practically inert and forms no chemical salts or other compounds, its existence is but temporary, lasting a little less than four days—3.86 days, to be exact—when it becomes transformed into something new. Whether this change actually occurs in mineral waters, however, we are not told.

Sir Walliam Ramsay, has further shown that, as is the case with other gases, niton is compressible, a simple compression at room temperature sufficing to convert it into a liquid. Moreover, when this liquid is pressed into a silica glass tube having a very fine bore, it becomes solidified into a microscopic rod of transparent icelike material. Though its transparency renders it invisible, it emits a brilliant light.

AN ANALYSIS OF 368 CASES OF PULMONARY TUBERCULOSIS examined at the Dispensary of the St. Paul Anti-Tuberculosis Committee, Leverett Dale Bristol, M. D., *St. Paul Med. Jour.*, Oct., 1912.

1. Of 368 positive cases only 67 (about 18 per cent) were in the earliest stage of the disease.
2. Only 27 per cent of the cases had a Family History of Tuberculosis.
3. Fifty-two cases had pleurisy in the past, 36 had pneumonia, and 19 influenza.
4. The average age was a little under thirty years.
5. The disease occurred slightly more in males (57 per cent) than in females (43 per cent).
6. The occupations of housewife, clerk, student, and maid, were those mostly involved.
7. The most common symptoms were cough and expectoration (76 per cent) and loss of weight (19 per cent).
8. The usual methods of treatment were employed.
9. About one-half of the patients had sanatorium or hospital treatment.
10. Glandular tuberculosis was far the most common complication.
11. 56 per cent of the patients died.
8 per cent were greatly improved.
7 per cent were apparently cured.
5 per cent were unimproved.
24 per cent left the city.

SALT-FREE DIET IN THE TREATMENT OF HYPERCHLORHYDRIA. M. Leo, (*La Semaine Medicale*, June 12, 1912) noted that the amount of chlorides in the feces of hyperchlorhydrics was below normal, and concluded that the chloride content of the tissues must be above normal. The correctness of this assumption was proved by the fact that a salt-free diet was only followed by a reduction of the free hydrochloric acid in the gastric juice after about two weeks, while in the normal subject the acid diminished almost immediately.

Following the publication of Leo's article, Richartz, of Hamburg, resorted to the salt-free diet in an aggravated case of hyperchlorhydria, in a man sixty years of age, which had proved rebellious to all forms of treatment. The pain was practically constant and enormous doses of alkalies afforded only transitory relief.

In addition to the salt-free diet, which included abstinence from all mineral waters, daily lavage was practiced two hours and a half after the principal meal.

Richartz has since applied this treatment in eight other cases, with similar results in six. He thinks, however, that the failure in the two cases was due to the fact that the patients did not adhere faithfully to the regime. In fact, except with intelligent patients, it is only when the pain is intolerable, that they can keep up the diet for a sufficiently long period. He calls attention to sodium bromide, which is an excellent substitute for salt in rendering the food palatable and, in addition, exercises a sedative action, which is very desirable.

He is of the opinion that the salt-free diet alone cannot bring about the desired result in severe cases, but that the mechanic removal of the excessive acid by lavage is a necessary part of the treatment.

PURPURA RHEUMATICA—Gonalons, (*La Semaine Medica*, Aug. 15, 1912) reports a case which appeared following a typical attack of acute articular rheumatism and two months after all rheumatic symptoms had disappeared. The eruption appeared on three separate occasions, lasting two or three days, hemorrhagic, confluent and accompanied by bilious vomiting, joint pains and headache. Later, hemorrhages from the bowel set in. Amenorrhea existed for three months previous to the appearance of the eruption and continued for more than a month afterward when a short metrorrhagia supervened. The bleeding was controlled by horse serum and the chloride of calcium.

BUFFALO MEDICAL JOURNAL

A Monthly Review of Medicine and Surgery

EDITOR

A. L. BENEDICT.

All communications, whether of a literary or business nature, books for review and exchanges, should be addressed to the editor, **228 Summer Street, Cor. Elmwood Avenue, Buffalo, N. Y.** **Subscribers, advertisers and exchanges please revise address.** Please make personal or telephonic calls before 1 p. m.

THE BUFFALO MEDICAL JOURNAL will publish regularly, full transactions of any professional organization in western New York at cost. Personal notices, brief reports of society proceedings, and the like, are always welcome and will be published without charge.

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Touting for Quacks

A physician who had recently lost a member of his family was pained to receive, shortly after his death, a circular letter addressed to the patient, and offering treatment by mail. This circular came from a distant city. The regularity with which advertising matter of this sort is addressed to the sick, indicates a systematic canvass for victims. It is scarcely imaginable that lists of names can be secured from attending physicians—certainly not in a case of the kind mentioned—nor that reports to boards of health are thus exploited—and, in the present instance, the case was not reportable. We strongly suspect that some of the advertisements of nice, light, remunerative work for ladies (not canvassing), refer to ferreting out of cases for quacks. Perhaps an investigation of the methods of obtaining address lists for quacks and popular education on the subject might be worth while.

A Happy New Year

The BUFFALO MEDICAL JOURNAL extends its greetings to its readers; thanks them for their cordial support in the past and looks forward to still greater usefulness as the details of cooperation to secure professional welfare, are worked out. A New Year message without good resolutions would be like bricks without straw so here are presented a few with the hope that they are not needed.

I will pay my debts promptly; have as few as possible; and, so far as possible without working hardship, encourage others in the same resolution.

I will neither pay nor accept commissions for the reference of cases but I will take this means of increasing my practice in preference to more under-handed methods not at present in the lime light.

I will keep the Hippocratic oath, not only in the narrow sense in which it is sometimes interpreted, but in the broad spirit that I will not exploit for selfish ends any advantage which my professional work affords in my dealings with other physicians, others professions, employees or patients of either sex or any age.

Without being a sore-head or a knocker and with due regard to the legitimate rewards of merit and service, I will use my influence to secure the fair and impartial administration of all professional trusts in the welfare of the profession and the people generally.

I will not step on the fingers of the man below me on the ladder. As to the man above me, I will not incur the curse of Deuteronomy, 25:11.

Water Pollution

A year ago, we discussed the Buffalo water supply. In October 1911, we discussed the Laurentian system of water ways. The first article in the present issue deals with the problem from the Canadian standpoint but in so broad a spirit that it throws light on the whole subject. While depending upon the same bacteriologic principles, the problem with regard to a well, spring, or water shed for a family or small community, presents quite different details in engineering and sanitation, economics and law, from that involving a large body of fresh water, although it must be conceded that most insignificant sources of water are tributaries to larger ones and, hence, gradually and remotely, approach the latter in this respect.

It is fortunate that the Laurentian problem is international in scope. While, at first sight, the necessity of joint action by two governments seems to be an obstacle to progress, further reflection convinces us that we are rapidly nearing the point at which the menace of the life and health of citizens of one country by the pollution of boundary waters by the citizens of another country must be considered an aggressive act, persistence in which would justify war quite as clearly as aggressions by traumatic measures or aggressions against property. We speak in no spirit of jingoism and hasten to add that the friendship and enlightenment of both countries preclude any such possibility, quite aside

from the fact that the interests of each country are the same. Thus, we feel confident that the international scope of the problem will expedite its solution.

Progress in Public Utilities

For most parts of the civilized world, the great moral issues of freedom of conscience and personal action, of arbitrary caste systems, of slavery, of popular education, have been solved. Most of the great questions of policy have either been settled, or have been reduced to minor differences of opinion between opposing principles, each modified so as to approach the other in practical application. For example, the dispute between states' rights and national concentration of power, between protection and free trade, have been reduced to a substantial agreement except as to questions of degree. And neither party in such a dispute would undertake a radical experiment but a cautious extension of theory in one direction, subject to a halt at the first indication of unfavorable result.

Statesmanship and, to an increasing degree, practical politics, are coming to deal with economic problems, with the actual carrying out of principles no longer in dispute, with the extension of fair and honorable methods from theory to practice, in both private and public business. It must not be overlooked that the doing away with great principles such as led to the War of the Revolution, of 1812, of the Civil War and perhaps, also the Spanish War, and the substitution of opinions of minor ethical importance, in political life, is not so much a sign of deterioration as of the accomplishment of moral and religious ideals. It was a grand privilege to write, to lecture, to endure insult and oppression, to sacrifice one's property and life, to wage war and overturn government, with the justification of a great moral issue. But we must not forget the terrible suffering and the horrible moral status of at least a part of society which made such moral issues possible. We can not wish for the persistence of such great issues any more than for the persistence of great epidemics and professional ignorance in order to return to the possibility of medical heroism of the old type instead of having the routine every-day heroism of effective study and practice.

The era of economic political issues is of direct interest to the medical profession. The maintenance and restoration of health, the saving of life, depend less and less on control of epidemics of whose nature we are ignorant, more and more on economic details. The stress of poverty, not so much in the

literal privational sense as in the difficulty of securing a steady, dependable outlet of one's industry and the ability to meet demands without hardship and anxiety, is rapidly assuming the importance which bacteria have filled.

About a tenth of all deaths are due to violence, of one kind or another. The control of various businesses, especially mining and manufacturing industries, public and private methods of transportation will eliminate a large share of violent deaths. Suicides are largely due, directly and indirectly, to economic conditions. Homicide is largely controlable by education, especially the education of the public as to the necessity of limiting procreation of criminals. And this education depends largely upon economic principles. A considerable part of the mortality is due to overcrowding in cities and can be remedied only by rational attention to economic details. Whether dealing with the literally overcrowded part of the population or not, another important item in the death rate is the failure to obtain proper sanitation and hygiene in dwellings, shops and other buildings. But, without actual or virtual confiscation of property, this reform cannot be secured until the enormous tax rate of the average city is so reduced by the application of ordinary principles of business economy to municipal affairs, that land lords can afford to provide light, ground space and ideal constructive features and still have a fair margin of profit.

Many acute cases of financial suffering, often leading to suicide, to exposure and overwork of women and children, with resulting disease and death, are due to insecure investments. In our experience, the great majority of instances of loss of savings by our own profession are due to investments in organizations not conducted in good faith. One of the important functions of government, already recognized in various countries and some of our own states, is the control of stock companies so as to secure the interests of active participants, investors and the public buying the commodity or service of the corporation.

Without ignoring various other economic factors, including details of political dispute, as the tariff, control of large industries, etc., the panics and periods of financial depression of recent years have been due, not so much to lack of actual productive wealth, available labor and desire to purchase either material or labor, as to the difficulty of securing the actual cash to effect an exchange. One hundred years ago, with a population mainly dwelling in the country and with each family directly producing most of its own necessities, the per capita cash was five to ten dollars, representing as many day's labor. At present, with the majority of the population depending upon actual cash for

the purchase of nearly all of its needs, the per capita cash is thirty to thirty-five dollars, representing about ten days labor, and with various business and political factors tending to concentrate this cash where it cannot be available as a medium of exchange. Thus, with supplies of necessities and convenience in abundance, with men ready and willing to work and to demand these supplies, there are frequently periods of months or years in which the available circulation of money is almost at a stand still. In short, the body politic is in much the condition of a normal animal with the portal vein ligated so that, in spite of a sufficient medium of circulation for the whole body, it practically bleeds to death into its own portal system. And, in a literal, individual sense, as well as a figurative, aggregate sense, this condition leads to suffering, disease and death.

The lessening of infectious disease, is gradually overturning the mortality tables so that, in the future, the more important fatal diseases will be those of degeneration, senile change, and accident. The average length of life has already increased nearly ten years in the last thirty years. It is no kindness to save an infant from the non-specific infection of the long nursing tube, or a youth from consumption, or an adult from typhoid, and to kill him by cerebral apoplexy, diabetes, etc., or to drive him to insanity, crime, homicide or suicide, by economic stress. Everything that conduces to general prosperity, that adds to the ease of exchange of money, that increases the purchasing power of the dollar, is an important factor in health and a worthy object of political consideration.

Addition to the Staff

It gives us great pleasure to announce the acceptance of the position of Associate Editor for France, by Dr. René Gaultier, of Paris. Dr. Gaultier's works, *Clinical Coprology and Diseases of the Duodenum* are classics. In 1908, at the Hotel Dieu, we derived great profit from his clinical and laboratory courses though hampered somewhat at the beginning because unfamiliarity with the language seemed to imply denser ignorance than was really our case. With the appointment of Dr. Gaultier, our foreign staff may be considered complete, although, at some future time, other countries will probably be represented. It may not be out of place to add that the men whose names lend dignity to the JOURNAL, have favored the editor with personal kindness and hospitality and are not merely names but living entities of happy memories and pleasant anticipation. The support, advice and cooperation of these men are deeply appreciated.

BACK NUMBERS WANTED. Our reserve file of the following issues has been exhausted by unexpected demands: Oct. and Nov., 1911; Feb., March, July, Sept., Oct., 1912. We will give three months extension of an existing subscription, three months of a new subscription or three copies of any current issue desired for each of the back numbers supplied.

TOPICS OF PUBLIC INTEREST.

W. B. Saunders Company, medical publishers, are now established in their new building on West Washington Square—an ideal site right in the heart of Philadelphia's new publishing center.

The remarkable success of this house and the rapid growth of their business, with the increased facilities which this growth demanded, necessitated removal to large quarters. They therefore erected a seven story building, housing all their departments under one roof.

Constructed of reinforced concrete, the building is absolutely fireproof and equipped with every modern aid for the manufacture and distribution of medical books and for the comfort and convenience of their employees.

A cordial invitation is extended the profession to inspect the new plant.

IMMIGRATION AND EMIGRATION. As there is a popular idea that almost all foreigners who come to this country, except as cabin passengers as globe trotters, remain here, the following statistics may be of interest. These are condensed and approximated from figures kindly furnished by the Bureau of Immigration and Naturalization. Regarding the "Yellow Peril," the figures are as follows:

Chinese			Japanese		
Entered		Left U. S.	Entered		Left U. S.
1263	3898	Year ending June 30, 1908	16418	5323	
8014	9565	Year ending June 30, 1909	4443	7493	
6516	7650	Year ending June 30, 1910	4146	7510	
5657	7065	Year ending June 30, 1911	6490	8333	
5491	6453	Year ending June 30, 1912	9430	8080	
26,941	34,631		40,927	36,739	

Without entering into details, it may be said that, in any one year, the emigration amounts to a third or even a half of the immigration. Naturalized citizens are not included in the emigra-

ton statistics. Years ago, practically every immigrant remained as a permanent resident, if he did not become a citizen, and those that returned to the mother country were few, consisting mostly of transient visitors and of aged persons going home to spend their declining years. At present, it is a common thing to find in Europe, persons in active business life, who have spent a few years in America. Sociologists, indeed claim that in various districts, mainly agricultural or manufacturing, returned immigrants, taking back with them comparatively small savings for America, but relatively large fortunes for Europe, and habits of enterprise, have revolutionized economic conditions so that there has been established an opportunity for development that successfully competes with the former call of the western world.

Of late years, the plurality, sometimes the majority of immigrants to America, have come from Italy. The Italians are great travelers, some crossing and recrossing the ocean many times, according to fluctuations of business.

Italians.

Entered U. S.		Left U. S.		
(North)	(South)	(North)	(South)	
24,700	110,547	19,507	147,828	Year ending June 30, 1908
34,116	212,857	24,773	101,063	Year ending June 30, 1909
35,192	215,445	22,591	63,554	Year ending June 30, 1910
37,253	176,107	24,065	93,297	Year ending June 30, 1911
34,243	155,680	25,857	139,421	Year ending June 30, 1912
165,504	870,636	116,793	545,163	Totals for five years.

It is quite likely that the decrease in immigration and increase in emigration in the last two years is due partly to the war.

PATRIOTISM AND MIGRATION. There has long been a prejudice against the southern tier of European countries or it may be that the general prejudice against the foreigner and the mutual prejudices among various kinds of foreigners have been thus directed on account of the influence of numbers and the making good of several generations of foreigners from more northern European countries to America. Recent events in China and in what, in our school days was called and looked like Turkey in Europe, show a surprising resemblance to the initiative, courage, patriotism and military genius displayed in this country in the third quarter of the eighteenth century. Even more plainly than in the case of the Italians, does the patriotic element appear in emigration statistics.

Entered U. S.

Bulgarians	Roumanians	Greeks	Turks	Year Ending June
18,246	9,629	28,808	2,327	1908
7,623	9,154	22,453	925	1909
16,374	14,954	41,172	1,422	1910
10,924	5,823	38,954	1,005	1911
12,698	9,436	34,243	1,430	1912
3,256	2,464	21,535	494	1912 July-Sept.

(Immigration not obtainable for October, 1912.)

Left U. S.

5,965	5,264	6,763	1,276	1908
3,626	2,102	9,128	1,150	1909
4,105	2,647	10,624	1,564	1910
8,700	7,108	14,419	2,290	1911
12,554	8,080	25,857	2,076	1912
1,614	1,238	4,952	587	1912 July-Sept.
1,057	405	1,764	277	1912 Oct.

The above figures would be even more significant if the sexes were distinguished. For example, about 800 Greeks left St. Louis in a body, this year to engage in the war and we understand that the emigration has been largely of males while women and children have figured disproportionately in the immigration.

PHYSICIANS WANTED. The Pacific Medical Bureau, 1065 Sutter St., San Francisco, announces a number of desirable locations in California.

AUTOPSY PLEDGES. The Associated Physicians of Long Island have adopted a resolution aiming to secure pledges from its members that they will require their heirs to allow post mortem examinations.

CONSUMPTION OF CIGARETTES IN THE U. S. The *Burning Bush* renders statistics startling by figuring a death's head in the smoke from a cigarette, along with the statement that 11,221,624,084 cigarettes were smoked in the last fiscal year. However, when we divide this by 100 million, the approximate population, the per capita consumption of 112 cigarettes does not look so imposing. Allowing for the fact that about a quarter of any community consists of grown men, the consumption would be about 500, per capita. This is equivalent to a moderate use of tobacco in other forms—for a single month—say 10 mild cigars a week

or a half an ounce a day of pipe tobacco. Right here is a good place to waste an editorial heading: *Don't let the Dividend alarm you; It's the Quotient that counts.*

CONTAMINATED ARTESIAN WELLS. South Bethlehem, Pa., is said to have had the first system of water works in the U. S., deriving the supply from springs in 1741. This supply has been in constant use till recently, when \$50,000 were spent for an Artesian supply. Almost as soon as the new supply was used, the water was found to contain colon bacilli and the town has temporarily returned to the old supply, with precautions, pending the establishment of a filtration plant for the Artesian supply. This unfortunate occurrence opens up many practical problems in engineering and leads us to inquire whether the water obtained by various hotels and factories from deep wells, not deserving the term Artesian, in our own territory, has been subjected to thorough tests.

SANITARY REFORMS. In St. Louis the Council of Civic Organizations, comprising eighteen of the leading organizations which are working for civic improvement, with a membership of 8,000 proposes:

Wrapping of bakery products in clean paper.

Sanitary care of tenements and running water on each floor of such buildings.

Abolition of the 20,000 vaults in St. Louis within five years.

To regulate the city's milk supply to insure absolutely clean and pure milk.

Proper heating and ventilation of street-cars.

NUMBER OF WORDS. We have been criticized for questioning so good an authority as Max Müller in regard to the extent of one's vocabulary. It is, in the first place, impossible to make an accurate count of words. Our Webster is said to contain about 114,000 words. On an average count of several pages, we find the number to be about 85,000. The discrepancy is due largely to counting the same words, used as a noun and as a verb, as one, and to ignoring inflexions. Many of the words are compound and, in this case, it is difficult to establish a rule. The dictionary apparently lists all compound words whose meaning is not readily suggested by the components. On averaging counts of several pages, we found that we could understand fairly well, the significance of about 60 per cent of the words. About a third of this number, we would be likely to use, repre-

senting a vocabulary of somewhere between 15,000 and 25,000 words; and three times as many understandable. Of course, if one took time to puzzle over obsolete and unusual words, which he did not know were in use at all, counted verbs and nouns of the same form as different words, and otherwise followed the more liberal count of the dictionary, one might claim to know 50,000 to 75,000 words. On the other hand, if one counted defender, defendant, defensive, defensible, defense, etc., as variants of defend, the vocabulary would be reduced to about a fifth and in this sense, Max Müller may be right in stating that a man with a university education would use only 3,000 or 4,000 words, especially when we recall that he referred directly to the German language which, even for technical terms, relies mainly on home-made compounds. But, as words are ordinarily counted, most fairly well educated persons have a usable vocabulary of at least ten thousand words. Indeed, the little vest pocket dictionaries for travelers contain as many, which are needed for ordinary purposes. Including technicalities, the average physician probably knows at least 50,000 words.

MEMBERS OF MEDICAL RESERVE CORPS TO BE FULL SURGEONS. On account of the unwillingness of prominent physicians to accept the rank of Assistant Surgeon, the Bureau of Medicine and Surgery will ask Congress to designate members of this corps as full Surgeons, there being but one rank in the corps. This is really a sensible proposition though, at first, it reminded us of early companions who would not play unless they could be captain.

THE MOWATT MEMORIAL HOSPITAL was opened at Kingston, Dec. 12.

DISCLAIMER OF NOTORIETY. The Ferment Co., of 124 W. 31st St., N. Y., disclaims the yellow press reports of the activity of its products in diabetes and other diseases and wishes the profession to judge them in accordance with conservative, scientific articles in the medical press. The sensational articles were published without authority by the firm, based on information given to physicians in response to what was considered a legitimate professional inquiry.

CORNING WATER SUPPLY. Many Corning physicians have protested to the Board of Health against using the present supply, which is highly charged with lime and which is polluted. They object to drinking even sterilized sewage.

— SYSTEMATIC COLLABORATION REGARDING SANITARY CONDITIONS has been enjoined upon local health officers in Ontario, by Dr. J. W. S. McCullough, Provincial Health Officer.

MEDICAL SOCIETY OF THE STATE OF NEW YORK. Committee on prize essay. The committee in charge of the Merritt H. Cash, \$100.00, and the Lucian Howe, \$100.00, Prize Fund of the Medical Society of the State of New York, offer the suggestive, but not arbitrary, subjects upon which the competitors may write their essays:—

1. Diagnosis and treatment of syphilis of the central nervous system.
2. The present status of serum therapy.
3. Latest research relative to cancer.
4. The order and sequence of vascular and cardiac disease.
5. The function of the State in limiting the increase of imbeciles and degenerates.
6. Surgery in functional and organic disorders of the stomach.

The essays must be in the hands of the Chairman of the Committee, Dr. Albert VanderVeer, 28 Eagle Street, Albany, N. Y., not later than April 1, 1913.

Dr. John F. W. Whitbeck, 781 Park Ave., Rochester, N. Y.

Dr. Edward D. Fisher, 46 East 52d St., New York.

Dr. Albert VanderVeer, 28 Eagle St., Albany, N. Y.

Committee.

SCHEDULE OF FEES. The Chemung Co. supervisors have established the following: \$10 for each examiner in an ordinary autopsy; \$20 in a homicide case; \$15 for examinations in lunacy.

FAITH HEALER DISCHARGED. The Medical Society of the County of Erie has recently lost its case against a faith healer in Buffalo. The evidence depended, as is usually the case in such prosecutions, upon a detective and such evidence is always discounted to some degree. The jury held that the defendant had the right to heal according to his religious views while his attorney made the stock accusation that the medical profession was actuated by mercenary motives to stop competition. *Hic populus vult decsepi; decipiatur in nomine diaboli.*

The contract for the FRANCES ELLICOTT AUSTIN MATERNITY HOSPITAL, at Albany, has been let at about \$175,000.

EXAMINATIONS FOR U. S. ARMY MEDICAL CORPS, will be held at points to be named in accordance with applications received, on Jan. 20. There are 35 first lieutenancies in the medical corps to be filled. The only requirement that is not obvious is a year's interne service. Applications should be made promptly to the Surgeon-General, U. S. Army, at Washington. Here is an opening for almost one per cent. of the total graduates of 1911. It is probably not an exaggeration to claim that 10 per cent of all medical graduates may obtain excellent public and institutional positions, at salaries exceeding the average professional income, almost immediately after completing their interne service.

COUNTY HOSPITALS FOR TUBERCULOSIS. The Steuben County supervisors voted against the purchase of 20 acres near Corning, at \$1,000, by 27 to 10. The Livingston County supervisors considered a petition on Nov. 21 and appointed a committee to investigate and report at a future meeting.

MEDICAL MISSIONARY OPENINGS. Mr. Wilbert B. Smith, Candidate Secretary, Student Volunteer Movement, 125 E. 27th St., N. Y. City announces the following: Woman physician for the hospital and dispensary for Women and Children at Jhansi, India; Woman physician for north-eastern Korea, with headquarters at Jen San; five trained nurses for hospitals in Turkey, India and Ceylon; two years internship, Good Samaritan Hospital, Guanaquato, Mex. It should be understood that while these positions require considerable ability and a sincere devotion to the missionary movement, they are adequately paid.

HYPERPAEDIOPHILIA. (We think that will hold some of the men who like big words.) A Cleveland woman has recently been arrested and placed in the observation ward of the City Hospital, for the deliberate attempt to keep her three children babies. Aged 2, 3, and 4, they were unable to walk or talk and only the oldest could creep, as she had kept them in cradles to prevent their

development. It is said that they were even stunted in growth. Most parents feel a tinge of sadness at the growth of their children from stage to stage and we have read a story of this sentiment exaggerated as in the real case mentioned—which is, fortunately a rare one.

ILLEGAL USE OF MAILS. One of the largest raids made by the P. O. Dept. occurred late in November. Inspectors had been watching various quacks, druggists and medical mail order houses on account of the use of the mails for objectionable medical and surgical devices. The raid covered 72 cities in 22 states and involved 175 individual offenders.

TUBERCULOSIS AND WATER SUPPLY. The Westchester supervisors have been denied permission to establish a tuberculosis hospital at Yorktown, on account of possible contamination of the N. Y. City water supply.

H. C. OF L. AND BUTTER. The United States has begun suit against the Elgin Board of Trade and the Am. Assn. of Creamery Butter Manufacturers as "in restraint of trade."

SAFE AND SANE FOOTBALL. Only 10 deaths and 36 serious accidents were reported in the U. S. for 1912, up to Dec. 1.

THE INTERNATIONAL JOINT COMMISSION met in Buffalo, Dec. 17, to consider the pollution of boundary waters between the U. S. and Canada.

OBESITY. Frank Chambers, of North Pelham Tp, Ont., was found dead in bed, Dec. 13, aged 43. He weighed 540 pounds and was considered the largest man in Canada.

U. S. PUBLIC HEALTH SERVICE EXAMINATIONS, for admission to the grade of Assistant Surgeon, will be held in Washington, Jan. 13. Application should be made promptly to the Surgeon General.

RETIRED AND NON-PRACTICING PHYSICIANS. The Medical Directory of N. Y., N. J., and Ct., has a special section under this title. Frequently the death is announced of some physician who ought to be thus listed but who is not. We also note in the active lists of Buffalo and other cities, a considerable number of names of physicians engaged in various occupations, among them the very laudable one of helpmate to another physician.

EARLY IMMIGRATION. It is stated that 20,000 English settled in New England between 1620 and 1640.

THE HOUSEWIVES' LEAGUE has succeeded in restoring the price of milk to 7 cents in Buffalo and in supplying good eggs at 21 cents a dozen when eggs of corresponding quality have been selling at 35 cents or more. It insists that, when it buys in wholesale quantities it shall have wholesale rates. It is carrying on an active campaign of education along both hygienic and economic lines and is perfecting its organization and increasing its membership. It is urged that the women of physicians' families should take an active part in this movement. Item by item, the league proposes to attack the problem of the increased cost of living, which is mainly the increased cost of foods, but in no narrow spirit. The recent government suit against the Butter Trust is said by local commission merchants not to be likely to affect the local market, as it is claimed that prices here have not been dictated by the trust but by the law of supply and demand, however, it is probable that, by direct buying from dairies, the league will considerably reduce the price of butter within a few weeks.

THE COLLEGE OF MEDICINE OF SYRACUSE UNIVERSITY announces the laying of the corner stone of the new dispensary building on Dec. 14. Chancellor James R. Day officiated. Wm. S. Thayer, M.D., LL.D., of John Hopkins, August S. Downing, First Assistant Commissioner of Education of New York State, and Alan C. Fobes in behalf of the Syracuse Free Dispensary Association gave addresses. The building will be completed by the beginning of the next college term.

MEDICAL STUDENTS STRIKE. It is reported that nine seniors from a Milwaukee medical school have left for a St. Louis institution and that about 250 students have ceased attending, on account of a reduction in rating by the A. M. A.

SOCIETY MEETINGS.

Secretaries of Societies in Western N. Y. are requested to send brief notices of meetings. Full transactions will be printed at cost of composition.

THE MEDICAL SOCIETY OF THE COUNTY OF CHAUTAUQUA held its annual meeting, Dec. 10, at Jamestown. The program included an address by the President, Dr. H. A. Eastman of Jamestown; a paper on Eclampsia by Dr. Garnet L. Hunter of Westfield; one on Treatment of High Blood-pressure by Dr. Fred C. Rice of Ripley; and one upon Duodenal Ulcer by Dr. Charles E. Goodell of Jamestown.

The following officers were elected: President, Dr. N. G. Richmond, Fredonia; vice-presidents, Dr. George F. Smith, Falconer; Dr. F. C. Rice, Ripley; secretary and treasurer, Dr. J. W. Morris, Jamestown.

ONEIDA COUNTY MEDICAL SOCIETY. In the matter of the proposed action of the Oneida County Medical Society in voting to discipline Drs. W. B. Reid, J. O. Stranahan, G. C. Reid and J. E. Groff, of Rome, N. Y., an injunction on the Society was served at the July meeting, postponing further action. The interest of the Oneida County Medical Society in this matter have been placed in the hands of Hon. E. M. Willis.

At the Annual Meeting of the ELMIRA ACADEMY OF MEDICINE, Dec. 4, the following officers for 1913 were elected: Pres., A. Mark; vice-president, John A. Bennett; secretary, Chas. Haas; treasurer, C. G. Jennings; trustees, John A. Fisher and A. W. Booth. Program: Report of the Congress of Surgical Clinics, H. W. Fudge; Asexualization, F. L. Christian.

The 91st annual meeting of the MEDICAL SOCIETY OF THE COUNTY OF ERIE was held on December 16th, 1912.

Officers for the year 1913, were elected as follows: Dr. J. F. Whitwell, President; Dr. John V. Woodruff, 1st Vice-President; Dr. Arthur W. Hurd, 2nd Vice-President; Dr. Franklin C. Gram, Secretary; Dr. Albert T. Lytle, Treasurer; Dr. John D. Bonnar, Chairman, Board of Censors; Dr. F. Park Lewis, Chairman, Committee on Legislation; Dr. Henry R. Hopkins, Chairman, Committee on Public Health; Dr. Harry Mead, Chairman, Committee on Membership; Drs. Thomas H. McKee, William H. Thornton, Charles A. Wall, George F. Cott and Edward L. Frost,

Delegates to the Medical Society of the State of New York, for the year 1913-1914.

Dr. Fred T. Koyle was elected to membership. Annual reports were submitted by the Treasurer, Chairman of Committee on Public Health and Chairman of the Board of Censors.

THE MONROE COUNTY MEDICAL SOCIETY held its annual meeting on December 17th. Considerable business was transacted relative to preparation for the meetings of the New York State Society which are to be held in Rochester April 30 and May 1. The retiring president, Dr. S. W. Little, made an admirable address. The result of the election of officers: President, C. R. Witherspoon; Vice-President, A. C. Snell; Secretary, C. W. Hennington; Treasurer, F. W. Seymour.

The HOSPITAL MEDICAL SOCIETY of Rochester, held its annual meeting on Dec. 19. Dr. Wynn B. Palmer read a paper upon the Therapeutic Value of Roentgen Rays. The new officers are: President, W. H. Sutherland; Vice-President, G. H. Gage; Secretary and Treasurer, G. M. Gelsir.

THE ROCHESTER PATHOLOGICAL SOCIETY has held meetings as follows: Nov. 29, Dr. C. L. Hericher read a paper on Gastric and Duodenal Ulcers. Dec. 12, Dr. A. M. Loewenstein on The Social Evils. Dec. 27, Dr. F. C. Goldsborough of Buffalo, on Toxaemias of Pregnancy.

THE ROCHESTER ACADEMY OF SCIENCE, on Dec. 9th, listened to an address by Dr. A. L. Benedict on Food Values, Physiologic and Oeconomic.

THE BUFFALO MEDICAL AND SURGICAL LEAGUE held its December meeting at the Statler Hotel. Dr. Benjamin Jacobson read a paper on Chloroform Anaesthesia. Dr. Richard Pearson led the discussion.

OUR CONTEMPORARIES.

Our Dumb Animals, December, 1912, approves our editorial suggestion as to cooperation to secure a rational vivisection bill but objects to the insistence of professional *control*. It is necessary in any moot subject that the final decision shall rest with the party having the most expert knowledge of the problem and it is not immodest, in this case, to claim control for the medical profession. Two facts are overlooked by many antivivisection-

ists: most physiologic experimenters are humane men; painful experiments introduce a disturbing reflex factor capable, for instance, of suspending secretion, of raising blood pressure and, in various other ways, of vitiating the result of experiment. 99 per cent of all painful experiments are foolish. The association of cruelty and piety is a curious one. In an old book, we read of a cruel experiment: a pregnant dog is delivered by Caesarian section to show—not a physiologic fact to physiologists, nor a surgical procedure that might help surgeons to save human life—but the dominance of maternal affection, the parent licking her offspring in spite of her pain; and this cruel and unnecessary experiment was performed for the edification of theologians. A few years ago, a gynaecologist in Germany suggested the acquisition of surgical skill in hebosteotomy by operating on the sheep, just before it gets the coup de grace at a slaughter house: and we denounced the cruelty of this suggestion in the *Medical Times*, pointing out that both mercy and operative analogy demanded that the practice operation be performed after the stunning or killing of the animal. At about the same time, some one reported to a medical or surgical association, a series of cruel mutilation of rats to demonstrate the existence of a “sixth” sense, and the paper was denounced by the profession as indicative both of cruelty and an unpractical, metaphysical conception at variance with the pragmatism of modern medical science.

Life has devoted a recent issue to the Doctor. The issue is of real value in determining the ethical standing of a few advertisements that have been carried by some medical journals and, negatively, so far as such evidence goes, of some others that have been criticised in certain quarters but which are restricted to medical journals. We regret that so many pages have been devoted to jests about the avarice, brutality and conceit of a profession which is, on the whole, poorly paid and almost without limit in its charity; which, so to speak, makes a business of being gentle and kind; and which realizes its lack of definite knowledge in many ways, and to such a degree that many of its members spend almost their entire leisure and nearly every cent of their income beyond a modest living, in trying to obtain more knowledge. Moreover, in every average issue, we note the death of some doctor, not as the result of the ordinary strain and risk of his work, but as a definite martyrdom in the attempt to save a particular life, or to advance medical knowledge in general. As we write, our attention is called to a news notice of three railway surgeons risking their own lives, not in any

strictly professional work that might be ascribed to habit, or in which the cynic might ascribe the risk to hope of glory, but in the hard manual task performed in the cold and dark, of sawing a railroad victim, out of a steel car. But, on the whole, *Life's* doctors' number is too hackneyed to call for either a laugh or a tear.

A VACCINATION YARN. *Life*, Nov. 7, 1912, quotes from *Open Door* "this sunny little anecdote of a school girl in Buffalo." "When two public vaccinators and two policemen visited her school to inoculate the pupils with virus at \$1.00 each, nine-year-old Lucille objected, saying she had been vaccinated and, if it must be done again, she would go home to have it done. But she was threatened and force was used. Thirteen days later and after ten days of suffering from blood poisoning, she died. Her mother lost her reason and was put in an asylum."

Inaccuracy No. 1. Vaccination in the schools of Buffalo is free to pupils. The vaccinators are not paid a dollar nor any other sum per capita, but perform this service, as part of their duty as city physicians. They are employed on an annual salary, or rather wage, as it is less than the average of clerical positions of low scale.

Inaccuracy No. 2. Every pupil is given an opportunity to be vaccinated by a physician privately employed and the certificate of any qualified physician is honored.

Inaccuracy No. 3. The references to threats and force are misleading. The law requires vaccination and it is obvious that nervous children or those encouraged by parents to resist the law may require control by methods which the prejudiced might thus describe, just as school discipline in any other respect might require coercion.

As to the gist of the matter, after careful inquiry of the Health and Educational authorities, we find the following as the only tangible basis for the story: A few years prior to 1900, a girl aged about five, in the first year of the grammar school, died after vaccination. There was considerable doubt as to the exact cause of death but an expert gave his opinion that it was due to vaccinia in virulent form. It is well known that vaccinia itself does, very rarely, assume this type and that it may be fatal. So far as we can learn, this is the only case of death resulting from vaccination that has occurred in the city of Buffalo since records have been kept. However much we may regret such an occurrence, it cannot be ascribed to carelessness; it is the inevitable risk of one in several hundred thousand cases necessary to protect against the almost inevitable occurrence of.

small pox on a large scale and the approximately one chance in ten that each case would die. It is one death in, say thirty years, as opposed to an average of about 25 deaths a year from scarlet fever—a fair comparison, as without vaccination, the two diseases are about equally prevalent and fatal.

We cannot learn that any child's mother ever became insane in Buffalo, because of vaccination.

If our statements are wrong, in any respect, we will publish corrections.

The *International Hospital Record*, Nov., 1912, in an editorial on the prevention of overstrain in nurses, regards actual overwork as a minor factor and mentions the necessity of overseeing the dietetic habits, nagging by head nurses, insufficient out-door recreation, etc. To which we may add the constant fear of discharge for minor infractions of rules, and the exercise of discipline and interference with personal liberty not encountered by any other class of students.

The same journal quotes, with approval, our criticism on the Baltimore resolution aimed at the suppression of news items mentioning patients and hospitals and adds:

"It may be well for those who seek to make the medical profession a 'close corporation' to bear in mind that the general public may come to the point where it will express itself regarding this. The recent national elections shows that the general public has developed of late years a tendency to speak out with remarkable force. The medical profession is entitled to all the honor it deserves by virtue of efficiency and broad-mindedness, and it should guard carefully against any action such as may be construed as narrow and selfish."

The *Bulletin of the Johns Hopkins Hospital*, Dec., 1912, contains an interesting historic article on the Last Illness of Louis XIV of France, by Dr. Carroll E. Edson of Denver.

Puck published the following which is appropriate to the medical profession, though not so designated: "The gods, perceiving that man was of few days and full of trouble, gave him philosophy. But, at that, the fellow was more comfortable than he had any right to be. 'Give him ethics,' the gods thereupon directed, by way of evening things up."

Pearson's Magazine, for January contains an article on the Schafer Phylacogens, by Arno Dosch. We question seriously whether the dissemination of rudimentary information in such

detail is wise. The publication of such an article also places the manufacturers of a medicinal preparation in an unpleasant light. In the present case, as in another recently mentioned, the manufacturers are absolutely blameless. Messrs. Parke, Davis & Co. have submitted copies of five letters passed between their office and that of *Pearson's Magazine*, covering the period from Oct. 17 to Oct. 25, showing that the firm made a vigorous protest against the publication of the article both on ethical grounds and on the practical objection that an imperfect popular conception of a remedial agent would lead to unwise attempts at its use and create an exaggerated opinion of its efficacy. The matter was left with the understanding that the magazine would abide by the decision of a number of reputable physicians, which it would choose—with the obvious result.

THE AMERICAN MEDICAL ASSOCIATION has appointed a committee to correspond with the British Medical Association looking to a joint meeting of the two bodies. The committee is composed of: Drs. A. T. Bristow, of New York; W. W. Grant, of Denver; G. H. Simmons, Chicago; T. W. Huntington, San Francisco, and E. J. Goodwin, St. Louis.

The Homoeopathic Recorder, Dec., 1912, approves the spirit of our remarks as to medical unity in so far as harmony and friendship are concerned but doubts the possibility of *unity* in the strict sense, on the ground that opposites and similars cannot mingle. When "old-school" physicians attend the annual ball of the Homoeopathic Hospital; when the Homoeopathic Hospital Staff sends a beautiful bouquet of roses to grace the opening festivities of the German Deaconess Hospital, that is harmony. But when Homoeopathic physicians frequent the Academy of Medicine, read and discuss papers; when "regulars" take patients to the Homoeopathic Hospital and find internes secretly smiling at their small doses; that comes pretty close to practical unity. Remember, very few of us hold to the doctrines of opposites. That is why we are so touchy about being called Allapaths, not because we want to claim the term "regular" in an autocratic sense. In fact, we don't want any specific designation beyond that of our profession. There is unity, as well as harmony between friends who call each other—quite in a friendly way—all sorts of hard names over questions of operation and medication, of abdominal and vaginal routes, of choice of antiseptics, heart tonics, etc. We want and in western New York, we have pretty nearly attained, the same kind of unity across what used to be hard lines of school opinion.

THE DENVER MEDICAL TIMES AND UTAH MEDICAL JOURNAL has been further enlarged to include a Nevada section. Each section is independently edited by Dr. Edward C. Hill of Denver, Dr. Frederic Clift of Layton, Utah, and Dr. George L. Servoss of Gardnerville, Nev. Jno. A. Stanson, the Business Manager, contributes to the Dec. issue, a scathing editorial "So that the perfect one may know," which we consider of rather doubtful value to the cause of independent journalism. Colorado, Utah and Nevada is a wide field for a local journal yet, in population, Western New York from Buffalo to Utica, is equivalent to these three states and also Wyoming, Montana, N. Dakota and S. Dakota.

PERSONALS.

Our readers are requested to send notes for this and similar news departments.

Drs. Jacob E. Helwig and T. C. P. Barnard, Health Officers of Pendleton and North Tonawanda, respectively, attended the annual conference of Health Officers of the state, at Syracuse, Dec. 5-7.

Dr. C. V. Wilson of Tonawanda, has been ill with pneumonia.

Dr. E. H. Mudge of Westfield, was in Buffalo early in December.

Dr. Howard L. Prince has become associated with Dr. Ralph R. Fitch, in the practice of orthopaedic surgery. Office at 365 East Ave., Rochester.

Dr. C. Haase has moved his office to the south-east corner of Lake and Water Sts., Elmira. Dr. F. Haase, the dentist, is associated with him.

Dr. Herman G. Matzinger of Buffalo was appointed medical council to Hickey, the confessed pervert and murderer of a little boy at Lackawanna. Dr. B. Ross Nairn served as alienist to Justice Brown, Rrs. James W. Putnam and Nelson W. Wilson as alienists for the prosecution.

Dr. James Wright Putnam of Buffalo, had his automobile stolen early in December. It was found the next morning with the head lights smashed.

Dr. J. F. Macpherson of Payne Ave., N. Tonawanda, has left for California, on account of his health, and may decide to locate permanently in one of the Pacific coast cities. Dr. Henry Lapp of Clarence has purchased Dr. Macpherson's residence and will assume his practice.

Dr. Earl G. Danser of Buffalo, Post Mortem Examiner, while returning in his automobile from investigating a death at Akron, steered into a shed to avoid wrecking a buggy. He sustained a fracture of the wrist. Dr. Bernard H. Brady who was with him, was thrown out of the car but was not seriously injured.

Dr. Allen W. Holmes is now living in Akron, N. Y.

Dr. Carl Alsberg, a chemist in the Bureau of Drugs and Plants, has been appointed by President Taft, on the approval of Sec. Wilson, to Dr. Harvey W. Wiley's position as Chief of the Bureau of Chemistry of the Department of Agriculture.

Miss Dorothy Hastings, a graduate of the Boston City Hospital, is in charge of the Nurses' Home of the Buffalo Homoeopathic Hospital.

Dr. J. H. Glass of Utica, has started on a tour around the world, expecting to return about May 1, 1913.

Dr. R. B. Lyons of Elmira, who was operated upon in November, for appendicitis, has resumed practice.

Drs. Henry and Mabel Flood of Elmira, have moved their offices to the Realty Building.

Dr. A. L. Benedict wishes to state that his views on diet are neither so interesting nor so original as certain press notices of lectures in Buffalo and Rochester, might indicate. This is not intended as a slur upon the reporters but it is obviously impossible in a short article, prepared from extemporaneous notes, and for the purpose of a newspaper, to present the qualifications and explanations necessary as a basis of criticism by those familiar with the subject from the medical standpoint.

Dr. George W. Kosmak of 23 E. 93d St., N. Y. City, is collecting notes on pregnancy occurring after oophorectomy. The attention of our readers is asked.

Drs. O. H. Babbitt and Wm. E. Walsh of Auburn, have been re-elected jail and coroner's physician, respectively.

Dr. J. H. Whitbeck of Cayuga and Dr. A. D. Stewart of Port Byron, have been elected coroner's physicians for Cayuga County.

Dr. Jack Killen of Binghamton, sustained serious injuries by colliding with a telegraph pole, in avoiding a pedestrian.

Dr. J. A. Lichty of Pittsburg, called on the editor, Dec. 13.

Dr. John H. Grant has moved from Albany to 202 W. 79th St., New York City.

Dr. Clifford A. Orr has been elected Treasurer of the Park Club.

Dr. Hyatt Register of Buffalo, has moved to 615 Elmwood Ave.

Dr. Bernard Cohen of Buffalo, spent three weeks in Atlantic City after attending the Clinical Surgical Congress in New York.

Dr. Herbert M. Tolfree, U. S. N., was the guest of Dr. H. G. Hopkins of Buffalo during the holidays.

Dr. Charles H. Frazier of Philadelphia, was in Rochester on Dec. 7th, the guest of Dr. W. A. Keegan.

Dr. and Mrs. J. M. Ingersoll of Rochester have been away for some weeks in the Bermuda Islands.

Dr. L. A. Whitney of Rochester, has just bought a home on Alexander Street.

Dr. E. L. Hanes of Rochester, recently purchased a home in East Main Street.

Dr. H. A. Sodden of Rochester, is occupying his home recently completed at the corner of Dewey Ave. and Albemarle St.

Dr. E. H. Wolcott has just returned from a short trip to New York.

Dr. E. W. Mulligan has returned from a trip in the South.

Dr. Mary Innis Denton, formerly of Buffalo, now of Western College, Oxford, O., spent the holidays in Buffalo.

Drs. W. W. Britt and R. P. Reagan of North Tonawanda, spent the holidays with relatives out of town.

OBITUARIES.

It is earnestly requested that friends of deceased physicians in western New York or of those having affiliations in this region, send us brief obituary notices or notify the family of the deceased of our willingness to publish such notices. Such notices should be sent as promptly as possible and may be accompanied by photographic reproductions.

Dr. C. S. Osborne of Ozone Park, Borrough of Queens, died Dec. 11 of cerebral apoplexy. He was a resident of Leroy in early life.

Geheimrat Dr. Wilhelm Ebstein, Prof. of Internal Medicine at the University of Gottingen, 1877-96, died Oct. 22, aged 76. He was especially known for his work on obesity.

Dr. Leon F. Harvey, Jefferson, 1859, died recently at New Rochelle. He was born in Buffalo in 1837, and practiced in Baltimore and Buffalo, chiefly, however, as a dentist. About 1887, he retired from dental practice and, as a matter of philanthropy and a token of his interest in medicine, devoted much time for several years to the management of the Fitch Provident Dispensary in Buffalo. Many will remember with gratitude not only his services to charity but his uniform courtesy and kindness to students and attending physicians.

Dr. Francis Findlay, Buffalo 1860, of Franklinville, N. Y., died at Parkville, Mo., Oct. 3, aged 78.

Dr. Harris A. Bostwick, retired, died at his home in Warsaw, Dec. 6. He had practiced in Rochester, Hermitage and Silver Springs.

Dr. Paul F. Bussman, Buffalo, 1882, of Buffalo, died Dec. 19, aged 52.

Edward John Kiepe, Ph.G., M.D., of Buffalo, died November 24th, 1912, aged 46. He entered the Buffalo College of Pharmacy as a student in 1889, graduating two years later with the degree of Ph.G. In 1894 he entered upon the study of medicine in the Medical Department of the University of Buffalo, receiving the doctor's degree in 1897. He was soon after called to the chair of Materia Medica in the department of Pharmacy and to that of Adjunct Professor of Materia Medica in the Department of Medicine, which positions he has filled continuously to the present time.

Professor Kiepe was much interested in the matter of scientific research and had prepared himself for such work by a post-graduate course in Johns Hopkins University and it was his expressed intention to continue his studies in Germany during the coming summer.

He was instrumental in organizing, in the University, the course of Pharmacology, now an important branch of scientific teaching in medical schools, and had done a considerable amount of work in animal experimentation in investigating the action of drugs in health and disease, aiding in elevating this branch of medical science to its present prominence. He was particularly interested in the most advanced ideas in therapeutics, in the application of which he had established a more than local reputation. He was the author of a text-book much used by students.

As an officer of the Pharmacy Faculty he served for many years as registrar and secretary, giving always of his best and bringing to every duty that painstaking ability, enthusiasm, faithfulness and devotion which characterized his every action in life. Of an intensely nervous temperment and more than usual sensitiveness, this close application to the affairs of the College together with a conscientious attention to the trying details of an exacting medical practice, united to induce a mental condition directly accountable for his untimely death.

Always a faithful friend, his generous nature and ready sympathy have endeared him to his associates and the thousands of students who have profited by his counsel and instruction. Those who were so fortunate as to have been associated with him intimately will regret the loss of his cheerful companionship, the ever-ready helpfulness and willingness with which, in true Christian spirit he assumed the burdens of others.

Dr. Max A. Keiser, Niagara, 1894, of Buffalo, died Dec. 10, aged 50. His death is ascribed to eating tainted food when returning from a study trip to Europe. He was a laryngologist of note, having given more than usual attention to otology.

Dr. Jules Constantin, formerly assistant to Dr. Doyen of Paris, was killed by bullets through the breast, while manipulating an aeroplane in the Bulgarian army service. After receiving the fatal wound, he made a return to the Bulgarian camp and a safe landing but was found dead at the helm, immediately afterward.

Dr. Robert A. Gunn, Buffalo, 1866, of New York City, died of morphine poisoning in Bellevue Hospital, Dec. 7, aged 68.

BOOK REVIEWS

POLK'S MEDICAL REGISTER AND DIRECTORY OF NORTH AMERICA, 1912. R. L. Polk & Co., publishers, Detroit. 2378 pages, \$10.00.

The present, twelfth edition, maintains its standard of convenience and accuracy. Beside a listing of physicians by localities and alphabetically for the U. S. and Canada, it includes lists of medical schools, journals, sanitariums, hospitals, societies, etc., a digest of medical laws for each state and various other valuable information almost indispensable to any physician in touch with professional matters. We have prepared the following table at some pains, as a basis for the study of various economic problems.

State	Population 1910	Ratio (Average Number of Physicians	Medical Clintele)
Alabama	2,138,093	2,303	928
Alaska	64,356	81	794
Arizona	204,354	260	786
Arkansas	1,574,449	1,952	801
California	2,377,549	4,425	537
Colorado	799,024	1,593	501
Connecticut	1,114,756	1,457	765
Delaware	202,322	256	790
District of Columbia	331,069	1,027	322
Florida	752,619	996	756
Georgia	2,609,121	2,669	977
Idaho	325,594	400	814
Illinois	5,638,591	9,679	583
Indiana	2,700,876	4,913	550
Iowa	2,224,771	3,604	617
Kansas	1,690,949	2,798	604
Kentucky	2,289,905	3,309	692
Louisiana	1,656,385	1,860	890
Maine	742,371	1,116	665
Maryland	1,294,450	2,078	623

Massachusetts	3,366,416	5,285	637
Michigan	2,810,173	4,102	685
Minnesota	2,075,708	2,094	991
Mississippi	1,797,114	1,646	1092
Missouri	3,293,335	6,136	536
Montana	376,053	494	761
Nebraska	1,192,214	1,697	702
Nevada	81,875	130	629
New Hampshire	430,572	685	628
New Jersey	2,537,167	2,572	986
New Mexico	327,396	408	802
New York	9,113,614	13,977	652
North Carolina	2,206,287	1,831	1205
North Dakota	577,056	579	996
Ohio	4,767,121	7,398	659
Oklahoma	1,657,155	2,168	764
Oregon	672,765	937	718
Pennsylvania	7,665,111	10,648	719
Rhode Island	542,610	726	747
South Carolina	1,515,400	1,258	1204
South Dakota	583,888	674	866
Tennessee	2,184,789	2,790	783
Texas	3,896,542	5,126	760
Utah	373,351	422	884
Vermont	355,956	671	530
Virginia	2,061,612	2,173	948
Washington	1,141,990	1,533	745
West Virginia	1,221,119	1,627	768
Wisconsin	2,333,860	2,352	992
Wyoming	145,965	168	868
Total	91,972,267	129,002	713

Continental U. S. (Exclusive of Alaska).

These statistics seem to show a much more favorable economic relation of profession to population than has been supposed, although they do not alter the actual experience of over-supply of physicians. We would be glad to have our calculation of ratios verified or corrected as, in running through a table of logarithms, a blur in the print or an error in following a line, makes a considerable error. Unusual ratios, however, have been verified by long division and we are certain that any mistakes will be within limits which will not affect the general deductions. It has been believed that the present directory would show over 140,00 physicians and that the profession would have shown an increase over previous listings. On the contrary, in many states, there has been an actual diminution. With increasing competition in

directories, more systematic canvass by local organizations, expedition of enumeration by more careful city directories and larger telephone service, and the carrying out of a constant revision during the intervening time, it seems certain however, that the error due to accidental omissions has decreased. We have elsewhere called attention to the probable increase in professional mortality by the fact that the present requirements as to medical education and licensure, have increased the average age at which practice is begun, while the actual decline in the total of medical graduates, still further increases the average age of the profession. Hence, it must have a higher mortality than previously, subject to the general effect of sanitary and hygienic improvements. Again, the Civil War not only called for a relatively large medical profession for army service, but, at its close, left an unusually large number of unemployed men in the twenties and thirties who naturally drifted in medicine. Within the last few years, there has been an enormous death list of physicians who had served in the Civil War, as surgeons or otherwise.

As to whether Polk's statistics are low, we can decide only by reference to Buffalo, with the conditions in which city we are reasonably familiar. Polk states that there are 750 physicians in Buffalo. The State Directory compiled with as great care as possible, gives only 703. Of these, we know personally, 42 that are either dead, moved away or engaged in other occupations, and only 4 additions. Many of the listing in either book, are retired or are internes not yet in private practice. Counting physicians actually practicing, Polk's figures are probably 100 too high for Buffalo. It is not probable that the listing for the entire country is correspondingly high and that 20% should be subtracted from the whole number but it is not at all improbable that the active list should be reduced by 10% making the entire practicing profession not far from 115,000, corresponding to an average clientele of almost exactly 800.

There is still another factor to be considered: The population of the U. S. is increasing at a rate of slightly over 20% in a decade. Even allowing for the fact that this represents an analogue to compound interest, the yearly increase is nearly 2%. It is a conservative estimate to place the present population at 95 million, which further increases the average clientele to 826.

Within the next few years, it is practically impossible that the average graduation of medical students can exceed 4000 a year (See page 159, October issue). The annual mortality of the 129,000 physicians will amount to about 2700. The various public services, teaching, laboratory work, etc., will demand at least 400 (10%) of the graduates. For the remaining 900—a liberal

estimate—there is annual increment in population of about 1,800,000, perhaps more. Approximately, the average clientele can be expected to increase by about 10 a year. By concerted effort, mainly by increasing low matriculation requirements to those of higher standard already in force in many states, it is feasible to bring about, within a very few years, a reduced graduation that will simply make good the death rate and demand of the public services. In this way, the average clientele could be increased by about 15 a year, or to 950 in 1920.

The irregular distribution of population and physicians is noteworthy, the average clientele ranging from a minimum of 322 for the District of Columbia—obviously fictitiously low on account of the considerable number of government surgeons stationed at Washington—to 1205 for North Carolina. There is generally, a high clientele in the states where sparse distribution of population demands the opposite condition, although the figures may possibly be due to difficulties in getting accurate statistics of physicians. The attraction of large educational centers is also conspicuous, and the excess probably consists largely of laboratory workers, teachers not in practice, and internes. The call of certain states to the tuberculosis and otherwise invalid members of the profession is also apparent.

THE PRACTICAL MEDICINE SERIES. Vol. VII. Pediatrics by Dr. Isaac A. Abt and Dr. May Mitchell of Chicago; Orthopaedic Surgery by Drs. John Ridlon and Charles A. Parker of Chicago. Published by the Year Book Publishers, Chicago. 240 pages, \$1.25 (Price for the Series of 10 volumes, \$10).

This is an excellent review of literature, of handy size, already familiar to our readers.

PROGRESSIVE MEDICINE. (quarterly), Vol. 14, No. 4, Dec., 1912. This series, under the editorship of Drs. H. A. Hare and L. F. Appleman of Philadelphia, is well known. The present number covers the alimentary tract, kidneys, genito-urinary organs, various surgical topics and contains a practical therapeutic referendum. Price, \$6.00 per annum.

BUILDING A PROFITABLE PRACTICE, by Dr. Thomas F. Reilly of New York, published by the J. B. Lippincott Co., Philadelphia, 290 pages, price not stated.

The book urges experience as interne and warns against the common cephalomegaly, gives practical information as to post graduate study, at home and abroad, state license, opportunities in the public service, etc. It advises the young doctor on almost every conceivable point, such as the equipment and location of an office, the fees to be charged, warns him against contract practice, vivisects consultants so keenly that they will feel no pain, and, in short, acts as a mentor till one has acquired

necessary experience and has made his place in the profession. The advice is thoroughly ethical, but shrewdly tears away the ethical mask of greed and graft, from those who would exploit the inexperienced physician.

THE CHEMIC PROBLEM IN NUTRITION. Dr. John Aulde of Philadelphia, published by the author. 410 pages, \$3.00.

The work deals with magnesium infiltration, as a new disease or, rather as one newly discovered in its relations to a wide variety of clinical conditions. General discussions of nutrition, metabolism, germination, and dietetics precede the detailed discussion of diseases of systems and symptomatic groups. The work is iconoclastic in many respects and sweeping in its claims for eliminant treatment of a peculiar kind. We do not venture to support the distinguished author but we ask for him a thorough study of his treatise and a fair trial of his methods.

THE PSYCHOLOGY OF INSANITY. Dr. Bernard Hart, London, published by the Cambridge University Press: G. P. Putnam's Sons, New York. (Series of Cambridge Manuals) 40 cents. 175 pages.

In the review of the history, it is stated that Hippocrates first discarded the daemonologic theory and clearly recognized insanity as a lesion of the brain. The analogy of the disordered psychic state of the insane to various inconsistencies and tendencies in the normal individual, is clearly traced and the whole discussion is lucid and interesting.

A PRACTICAL MEDICAL DICTIONARY. Thomas Lathrop Stedman, A. M., M. D., New York, published by William Wood & Co., New York. 1025 pages, profusely illustrated, 2d edition, limp leather, \$4.50, plain, \$5.00 with thumb index.

The exhaustion of a large edition in a year speaks well for this work and has allowed still further improvement. Every detail of the publisher's art has been used to lighten weight and facilitate reference, in spite of the enormous scope of the work. Beside its avowed function, the book contains much biographic information, presents many useful tables and gives hints on various practical points, wherever these could be presented without too great excursion from the province of a dictionary. The author is scholarly, yet does not insist too strongly on reforms of nomenclature, hinting instead at the proper substitutes for incorrect terms in common use.

ANUARIO MEDICO SUD AMERICANO, 1912. Puccio y Muhlrud, 450 Calle Maipu, Buenos Aires. 394 pages, paper cover, \$5.00.

This gives lists of physicians, druggists, dentists, etc., of Argentina, Uruguay and Chili. Among the lists of specialists of the

"Federal Capital," are over 200 surgeons, 38 gastro-enterologists and others in proportion. As we understand it, the term "Federal Capital" refers to a territory like the District of Columbia, including the city of Buenos Aires. While the names are mainly Spanish, there is obviously a considerable mingling of other races.

MORTALITY STATISTICS, 1909, issued by the Bureau of the Census. 1912.

This is a valuable volume for reference, although we are more anxious to receive the Census Reports of 1910 which, we understand, have been delayed like the present volume, not through any fault of the Bureau, but on account of lack of appropriations for hastening the work. Still, as the estimates of population have been corrected in accordance with facts from the census of 1910, this report is of more practical value than might be supposed. We select the following points of interest at random. The registration area now includes 56.1% of the total population: 50,870,518 of 90,691,354 total estimated population for 1909. In a thousand deaths, 539.5 are of males, 460.5 of females, the difference being due to the almost universal excess of male births and the still inevitable excess in the first year of life. The relative deaths by age (not mortality for population at any age but proportion of a mixed series of deaths) drop rapidly to 8.6 for the age of 4, reach a minimum of 15.9 for the five year period 10—14, and increase gradually to 58.5 for the period 65—69. 1.8 per thousand deaths occur within the ages 95-99 and 0.4 after 100.

A CENTURY OF POPULATION GROWTH IN THE U. S. 1790-1900.

This is a most interesting volume prepared by the Bureau of the Census. We select a few topics at random.

The standard of 8000 population as the minimum of "Urban Population" was first reached by Boston between 1700 and 1710. In 1790, when the first U. S. Census was taken, there were only five cities of greater population: 1. Philadelphia, (42,444), 2. New York (33,131), 3. Boston (18,038), 4. Charleston (16,359), 5. Baltimore (13,503). Salem, however, was at nearly the urban minimum (7,921). In 1730, nearly 5% of the total population of what is now the U. S., was urban in this sense. Owing to the relative insignificance of industrial and commercial occupations, the urban population declined (relatively to the total), till 1780 and then rose gradually to reach nearly the 5% ratio in 1810 and 1820. Since 1820, it has always increased and at nearly the same rate except for a slight diminution in the decade from 1870 to 1880. In 1900, the urban population amounted to 40.5%

and, in 1910 to 46.3% of the total. By the next census, it will almost certainly have passed 50%.

The matter of fertility is important, medically and sociologically. In 1790, there were eight white adults over 20 to 10 children. In 1900, there were 16 to ten. This is nearly the same ratio as for most European countries except France, where the ratio is 24 to 10. In various other ways, the fertility is shown to be less.

The 3,929,214 inhabitants of the U. S. in 1790 were divided among about 30,000 sur-names. Smith, which was a very rare name in America up 1700, now composed nearly one per cent. Eight other names comprised about 3% more. Members of colonial families will find statistics of a number of heads of families and others, of their surname, alphabetically tabulated.

Of the approximately 75 millions in 1900, it is estimated that 35 millions are American according to George Francis Train's definition—to which Carl Schurtz objected that G. F. T.'s Americans were so by a series of accidents of birth while he himself was an American by intelligent and deliberate choice. We are rather inclined to regard this estimate as high and that not more than a third of all Americans are of colonial stock. For most cities, the proportion is much lower. Nearly nine million of the population in 1900 were "colored," mostly negroes. Practically all the negroes are colonials and, that the race question is being solved by natural means, is indicated that, if relatively as numerous as in 1790, they would be more than one and a half times their present number.

From the preliminary Bulletin of the Census of 1910, we glean that the population has always increased absolutely from decade, to nearly 92 millions in 1910; that the increase for a decade has always been greater than for the previous decade, except for that covering the Civil War, but that the percentage increase which kept close to 35% between 1800 and 1860 has fallen to about 21% for each of the last two decades.

The population per square mile has increased from 4.5 in 1790 to 31 in 1910. Aside from the District of Columbia, ten states including New York as fifth in order, have populations of over 100 per square mile. Excluding the District of Columbia (5518 per square mile) and Rhode Island (508) which are virtually cities with suburbs, the most densely populated states are Massachusetts (418) and New Jersey (337). Porto Rico comes next with 325. If the whole continental U. S. were populated to the degree of a little over 300 per square mile, which seems compatible with self-support, the total population would be about a billion. This number would be reached at the present rate in about A. D. 2030 or 2040.

RACE IMPROVEMENT OR EUGENICS, by La Reine Helen Baker, published by Dodd, Mead & Co. 137 small pages, \$1.00.

This is an excellent popular presentation of the subject, dealing with the abortion evil, control of offspring, sterilization of the unfit, legislation in the interest of pregnant and parturient women and their offspring, etc. In discussing the feminist movement, it would seem that the complaint that men have not adequately protected married women, is scarcely just. No law can compel the incompetent to be competent nor the criminal to be moral and law-respecting but there is no subject of legislation in which the laws are so absolute, far-reaching and partial, as in those dealing with the duty of support of the wife by the husband. In most states, while the woman loses no property right by marriage, the husband becomes practically a minor so far as title to real property is concerned. In one respect under this heading, we agree thoroughly with the author, however; namely that a man should not be allowed to gamble or speculate to the possible loss of his wife or family. Indeed, we would go farther and urge legislation to check these evils so far as possible, without regard to social state. And, at the risk of appearing to be a misogynist—of which we have never been accused—we would remind the author that a great deal of the speculative evil and of business failures are due to men's ambition to support their families in affluence.

BACTERIA, by Dr. Max Schottelius, translated by Staff-Surgeon Herbert Geoghegan, R. N., published by Henry Frowde and Hodder & Stoughton, London, 334 small pages, 10 colored plates and 33 illustrations. \$3.50.

While this is a valuable work, the title is somewhat misleading as indicating a systematic consideration of bacteria. It does give a general discussion of bacteriology but it includes protozoic diseases and consists rather in a general treatise on the principles of infection and prophylaxis, immunity, etc. We recommend it to the general practitioner and to the philosophic student. The expert bacteriologist or sanitarian will find little in it with which he is not already familiar and it is not adapted to use as a guide for the detailed study of bacteria.

THE THERAPY OF SYPHILIS by Dr. Paul Mulzer of Berlin, translated by A. Newbold. Published by the Rebman Co., New York. 248 pages, cloth, \$1.50.

After a brief discussion of the "former mercurial therapy," atoxyl, arsacetin, atoxylate of mercury, hectine, soamin and arsenophenylglycin bring the work up to page 44. From this point on, it is devoted almost solely to the technic and detailed indications and contraindications, dose, etc., of 606.

SECOND ANNUAL REPORT OF THE STATE CHARITIES COMMISSION of Illinois, for the year 1911. Published by the Illinois State Journal Co., State Printers.

This report contains 351 pages and treats in detail of the jails, state hospital, various other institutions and out-door relief. It betokens a spirit of thoroughness and practicality and contains much of interest to students of penology, institutional management, etc., wherever located.

PHYSICAL DIAGNOSIS by Dr. Richard C. Cabot of Boston, published by Wm. Wood & Co., New York; fifth edition, 519 pages, 5 plates, 268 figures, \$3.00.

As previously noted, Cabot has an original way of presenting a subject so that, on first opening the book, we have a pleasant disappointment. This does not imply that the heart, lungs and abdominal organs are neglected. On the contrary, the various lesions are exceptionally well presented, with the inclusion of charts of graphic records by instruments of precision. But the face, neck, legs and other regions are included in the book and the term Physical Diagnosis is given the broad interpretation which it deserves.

CORRESPONDENCE.

December 26, 1912.

The Editor BUFFALO MEDICAL JOURNAL:

Dear Sir:—That there are men in general practice who do not realize the necessity of early refraction in cases of strabismus seems to be evident from statements occasionally heard, especially in dispensary work. "Our doctor said not to mind the baby's cross eyes. He said he would outgrow it."

This is very wrong. When an eye witness to turn, no matter how young the child, the refractive condition should be ascertained. It is possible to do this with absolute satisfaction regardless of the age. A colleague prescribed lenses for an infant of seven months the other day. The proportion of eyes straightened by lenses before the age of five is very much greater than when the correction is delayed beyond that age. But the important point is that vision is retained. An eye which is constantly turned for a long time loses a great part of its power of vision, and when once lost in this way seldom is much of it regained.

All this will seem elementary to most of your readers, but, there are some who do not have the proper conception of the requirements in these cases, is certain.

Very truly,

H. W. COWPER.

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ORIGINAL ARTICLES

Isotonic Sea Water in Therapeutics*.

By DR. ROLLIN H. STEVENS

Dermatologist and Roentgenologist to Grace Hospital and German Polyclinic
Detroit

IN these days of modern medicine with its very high standards of education, its therapeutic nihilism and its therapeutic numerosity, with its consequent quackery and multiplicity of medical sects, with its scientific skepticism and its psychic research, one who, at least thinks he thinks, becomes somewhat Oslerian and hesitates to give full credit to any therapeutic method, which may theoretically and practically appear to be of great value.

And so when there is introduced a new therapeutic method of such wide applicability as isotonic sea water, the principles of which are new to some, it is done with considerable hesitancy, with a realizing sense that the case is not proved, and that the jury will disagree. However, it may be decided the facts herein presented are at least worthy of most serious consideration.

For whatever of benefit there may be derived from the use of isotonic sea water in therapeutics, the world is indebted to Dr. Rene Quinton, assistant in the Laboratory of Pathological Physiology in the College of France.

Quinton, who is a biologist, and not a practitioner of medicine, in the year 1897 presented to the Societe de Biologie three papers concerning the action of sea water. These were followed in the next year by two more, one entitled "The Amoeboid Movements of White Blood Corpuscles in a Marine Dilution," and the other, "Constancy of the Marine Medium as a Vital Medium Throughout the Animal Series." In 1904 he published a book of some five hundred pages entitled "Sea Water the Organic Medium." A second edition of this book appeared this year.

Since then Quinton, Simon, Fumeux, Arnulphy and other writers have contributed to the literature of the subject in the French journals.

As early as 1900 two papers were presented to the International Congress for Tuberculosis in Paris on the treatment of tuberculosis by sea water.

* Read before Wayne County Medical Society, Detroit, Mich., Dec. 16, 1912.

The evolution of the theories and demononstration of the laws upon which sea water therapeutics are founded, represent on the part of Dr. Quinton, I understand, some twenty years of study and research in the Marine Biological Laboratories at Arachnon and in the Laboratories of the College of France.

Before describing the treatment and its results, we shall review briefly Quinton's theories, demonstrations, and laws, in order to better appreciate the foundation on which the therapeutics rest.

1. *Aquatic Origin*.—The aquatic origin of every animal organism is accepted because it derives its origin from a primary cell, which being mostly liquid enclosed by an osmotic membrane must necessarily be aquatic; because, after the cellular stage, the first stages thru which typical embryos of all animal groups pass, are stages clearly aquatic, and because of the convincing results of the study of the four different modes of respiration in animals, namely, the cellular, tegumentary, branchial and tracheal, which we shall not discuss at this time.

2. *The Marine Origin of the First Animal Cells*.—All the animal organisms are derived from marine animal organisms, and every organism is derived from a cell, so, it naturally follows, that the original cell was of Marine origin.

Again today there is a considerable number of marine organisms which are derived from marine cells by processes of development which are the least differentiated primitive processes, processes therefore which would be proper for the ancestral organisms of all animal stocks.

Therefore, the ancestral cells from which have been derived all animal organisms have been marine cells.

3. *The Maintenance of the Original Marine Medium as the "Vital Medium" of the Cells*.—What is the "Vital Medium?" It is the totality of the plasmas of the cranial, peritoneal, pleuritic, pericardic and joint cavities; of the interstitial lymph; of the lymph channels; of the haemolymph or blood; of the plasmas of imbibition present as a result of osmosis in epithulium, endothelium, etc., of the different fundamental structural substances in cells; of the basal membranes and intercellular cement; of connective tissue and cartilage, etc.

Quinton discards the old histological divisions of the organism which are founded on the notion of tissue—namely, the epithelial, nervous, muscular connective cartilaginous osseous blood, lymphatic, etc. This division does not separate the Vital Medium from that which is not Vital medium.

He substitutes for the old classification four grand divisions. viz:

1. Vital Medium which has been described.
2. Living Matter.
3. Dead Matter.
4. Secreting Matter.

Living Matter is composed of the whole of the cells endowed with the life of the organism according to the organ to which they belong.

Dead Matter is so called because it partakes of none of the characteristics of the living matter. It is truly inert matter; DEAD, tho of living origin, and is the ensemble of all cellular productions destined to play in the organism a role purely physical or mechanical.

It may be for union or for isolation of cells, such as the fundamental substance of epithelium, connective tissue, cartilage, etc. It may be for architectural support, such as the fundamental substance of dense connective, cartilaginous and bony tissues, connective tissue of fasciuli and of elastic fibres. It may be for attack or protection, as the fundamental substance of dental tissue, epithelial covering of the whole ectoderm, etc.

Secreting Matter is composed of the various secreting cells of the organism. The vital medium through the processes of osmosis and diffusion, provides the living secreting matter with the elements necessary for their proper functioning growth and development.

By many personal and numerous reported authorities, chemical analysis, by comparative biological examination, and by physiological experiment, Quinton establishes the close similarity of the Vital medium thru out the animal series with the original sea water in which animal life first appeared, and the sea water of today, due allowance being made for evaporation and condensation in the process of cooling of the earth's surface.

The chemical analyses are not yet complete, the detection of some elements probably present in infinitesimal amounts being somewhat difficult with our present knowledge.

He has shown, however, that these infinitesimal amounts are absolutely essential to the functioning and life of the whole organism, that the importance of any element cannot be gauged by any means, by the mere proportion in which it appears in the organism.

The few milligrams of iodine present in the whole body of a human being and confined to the thyroid gland are absolutely essential, not only to health and well being, but also to life itself. Those few milligrams of iodine are thus just as important to the animal mechanism as the Sodium Chloride which predomi-

nates over the mineral composition of the plasma. The same is true of the infinitesimal quantity of arsenic and other elements present only in infinitesimal amount.

The kinetic energy set free from the potential is often out of all proportion to the transforming agent. The friction of a match or a spark of electricity is sufficient to transform enough energy in powder to destroy a powder magazine or move a mountain.

By variations of pressure of less than a thousandth of a millimeter, different degrees of penetration in the X-Rays are produced. And so it would seem to be quite impossible to make an artificial sea water or Vital Medium, because the leaving out of an infinitesimal which appears to be essential to the natural properties of the whole would be as serious a blunder as leaving out the sodium and chlorine.

In vertebrates as well as in invertebrates direct chemical analysis confirms the identity of the "Vital Medium" and the Marine medium. Chemical analysis of modern sea water shows it to be composed as follows:

Water	1000
Dissolved Salts...	35

These salts are divided into four great groups of decreasing importance as follows:

		Hundredths of The Solution.
1. Chlorine } Sodium }	forming for them alone.....\....	84.
2. Sulphur } Magnesium } Potassium } Calcium }	forming altogether.....	14.
3. Bromine, Carbon, Silicon, Ferrun, Nitrogen, Ammo- nia, Fluoricum, Phosphorus, Lithium, Iodine, Borium..	forming altogether al- most the totality of the remaining salts...	1.9997
4. Arsenic, Copper, Silver, Gold, Zinc, Manganese, Strantium, Barium, Cœ- sium, Rhubidium, Alumin- um, Lead, Cobalt.....	All these bodies only constituting together an infinitesimal part of the dissolved mass	0.0003
		100.00

Quinton, however, to maintain his thesis, "the constancy of the original marine medium of the cells" rightly argues that the

chemical composition of the modern sea does not matter so much, but we should know the composition of the ancient sea in which animal life appeared, which was not until after the earth cooled to 44 or 45 C. or the precambrian period. Portions of the ancient seas being isolated came to an end by being separated completely from the oceanic mass. Evaporation of their waters kept them solid banks of saline deposits which we use and study today in the many mineral springs in different parts of the world. We have no deposits of the precambrian period, but those at the end of the primary (Permian) period and beginning of the secondary (Triassic) period are numerous. These are relatively near the precambrian seas in point of time, and the analysis of these deposits shows a striking analogy between the composition of the ancient and modern seas.

There is not time to go into any details concerning the hundreds of analyses of the waters of the ancient and modern seas, nor of the "Vital Medium." Suffice it to say that they approximate very closely the analyses just given for the modern sea water, all the elements mentioned, except gold and cobalt, being found, directly or indirectly, in the plasma or "vital medium" of the animal economy.

It may be asked, "Do not these elements gain entrance to the organism through the food and drink and their amount vary with the alimentation? This does not appear to be likely for superior vertebrates are nourished by vegetables extremely poor in chlorine and in sodium.

To be sure there exist some inferior organisms which have not conserved their original marine medium, such, for instance, as the *Anodonta cygnea* (fresh water mussel), fresh water hydra, etc. They are open osmotically to the ambient medium, but these organisms seem to be manifestly in a state of degeneration.

The more and more complicated and independent organisms inhabiting the border of the sea, then living afterwards in the fresh waters and on the land, have always tended to preserve their component cells in a natural or modified marine medium.

For instance, in the primary organisms of the animal series the porifera, hydrozoa and scyphozoa, the internal vital medium is sea water itself. It penetrates the entire organism and bathes all the cells, being carried there by the innumerable canaliculi, analagous to the capillaries.

In the higher marine invertebrates the external covering of the animal is permeable to the water and salt, so that the internal vital medium of the animal is from the mineral point of view a marine medium.

Out of a total of 15 groups, 23 branches, 61 classes, 228 orders composing the animal kingdom, the marine invertebrates constitute of themselves alone 12 groups, 18 branches, 46 classes, 43 orders.

In the fresh water invertebrates the animal is neither permeable to water nor to salts and preserves in an external medium almost totally unsalted its vital medium, which is in a very high degree saline, specific constant, and always analagous to the sea medium.

Finally, in the highest organisms of the geological series, the vertebrates, the farthest removed from the marine stock, experiment and chemistry established the identity of the vital medium of the cells and the sea medium, as witness these experiments of Quinton's:

Three dogs were injected with isotonic sea water, the first with 66 per cent. of its weight, another with 81 per cent. and the third with 104 per cent., without anyone of them presenting the least trouble.

Again, he almost completely exsanguinated two dogs, and at the moment when they were about to succumb, he injected a quantity of isotonic sea water equal to that of the blood lost. The following day the dogs ran about, and in five days they had recovered their lost haemoglobin.

We took a unit of blood from all classes of vertebrates (fish, batrachians, reptiles, mammifera, birds) mixed it with varying quantities of sea water, namely, 25, 50 and 100 times greater, and established that the white corpuscles live with all the appearances of a normal existence, when it is impossible to preserve them in any other foreign medium, save normal salt solution, and in that they live only a few hours at most.

Quinton, as a result of his observations and experimentations, announced the following laws which form the basis for sea water therapeutics:—

LAW OF ORIGINAL MARINE CONSTANCY.

"Animal life, which appeared in the cellular state in the sea, has tended to maintain for its high cellular functioning throughout the zoological series, the cells composing each organism in a marine medium. It has not maintained this medium in all organisms, but those in which the maintenance was not effected have undergone a vital decadence."

LAW OF THERMIC CONSTANCY.

"In the face of the cooling of the globe animal life which appeared in the cellular state with a determined temperature, has tended to maintain for its high cellular functioning, in the or-

ganisms indefinitely created to this end, that temperature of origin."

LAW OF OSMOTIC OR SALINE CONSTANCY.

"In the face of progressive concentration of the oceans, animal life which appeared in the cellular state in seas of determined saline concentration, has tended to maintain thruout the zoological series for its high cellular function that concentration of origin."

GENERAL LAW OF ORIGINAL CONSTANCY.

"In the face of variations of every order which its different habitats in the course of ages can undergo, animal life, evident in the cellular state in determined physical and chemical conditions, tends to maintain for its high cellular functioning throughout the geological series, these conditions of origin."

Quinton comments on the general law of original constancy thus:—

"This law shows what modern science has endeavored to ignore—that life is a phenomenon subject to sufficiently narrowly determined conditions, for, since its origin, in spite of the time that has passed, in spite of combat, in spite of the causes of variation, life does not appear to have done better than to maintain invariable for its high activity the conditions of origin."

In 1906 there was established by one of the children's societies in Paris a dispensary for the treatment of disease by subcutaneous injections of isotonic sea water. A short time later there was established another similar dispensary in another part of the city. And now there are several such dispensaries in Paris and other French cities.

In 1909 it was my privilege to visit these dispensaries and investigate the claims made for the treatment. I was so impressed with the apparent success of the method that I brought home a supply of the prepared isotonic sea water in sealed ampules and began the treatment in my private practice, and am still continuing it.

SOURCE OF SUPPLY.

Through the courtesy of Mr. George M. Gray, Curator of the Marine Biological Laboratory at Wood's Hole, Mass., fresh sea water captured many miles from the coast, and at considerable depth, in sterile carboys has been received about every month.

This, after filtering through filter paper, is diluted in the proportion of two parts of sea water to five parts of freshly distilled water, and this is then twice filtered through a germ proof Chamber and filter into sterile glass receptacles ready for use by subcutaneous injections. Of course sea water for this pur-

pose cannot be sterilized in any other manner without changing materially its composition. Indeed, Quinton showed that sea water heated in the autoclave one-half hour at 120 C. was so toxic that when 700 c.c. were injected into a dog of 10 kgr. weight, it died in a few days. He was never able to obtain amoeboid movements in white blood corpuscles placed in sea water mixture thus sterilized. At 105° these effects are attenuated rapidly. Sea water kept in this temperature for ten minutes only gave excellent results. Lead glass containers destroy its therapeutic value.

The container is fitted with three feet of pure gum rubber tubing with heavy wall and a lumen of about one-eighth inch and a platinum needle of about No. 20 gauge, both of which latter have been thoroughly boiled. After sterilizing the skin of the buttock, just behind the great trochanter, where the injections should be made, and after making sure that all water in which the tube was boiled has run out, and that all air is forced out, the needle with a quick thrust is driven straight into the tissues for about an inch. This is usually quite painless if done with dispatch. The sea water then runs in slowly while the patient remains in the sitting or recumbent position. It is better when several injections are given the same patient, to inject in the same place each time as the local pain following the first injection is much attenuated in the later ones.

DOSE.

Quinton advises that an amount equal to about 1/100 or 1/150 of the body weight of the patient be given as the minimum dose. For instance, a man weighing 150 pounds should receive about 700 c. c.

In the dispensaries in Paris, however, I noted they usually gave no more than 50 to 200 c. c. to an adult of such weight and larger doses proportionately, 30 to 75 c. c. to children, who seem to bear relatively larger amounts with less reaction.

In my practice doses of varying size from 30 c. c. to 800 c. c. for an adult have been tried and the larger doses appear to give better results, namely, 200 to 700 c. c. for the adult, repeated every five to ten days. The dose and interval of repetition will depend somewhat on the condition being treated. This will be discussed later.

Quinton advises using fresh sea water. It loses its properties after varying lengths of time—a few weeks—and becomes relatively toxic. In psoriasis, however, I have recently been informed by Dr. Arnulphy of Paris that the older the sea water is the better. In the last three months I have tried this out on a few cases with better success.

IMMEDIATE EFFECTS OF THE INJECTION.

Depending upon the size of the dose and the susceptibility of the patient following the injection there will be a reaction more or less severe. As the water is running in there is usually no pain. Immediately after the hip feels full and heavy. In a variable period after, usually about four hours, but it may be before the injection is completed, or within one or two hours after, there is frequently a chill more or less pronounced lasting a few minutes to an hour or more. This is accompanied by a rise of temperature of one and one-half to two, or even four degrees. There is likely to be a little nausea and some aching of the limbs, head and back. This may only last a couple of hours, but usually about twelve hours, and may be prolonged to forty-eight hours. There is thirst and often increased urination.

In one case a thin, overworked woman of about 90 pounds who had had gonorrhoeal infection and several abdominal operations, the reaction on several occasions were severe after the use of 50 c. c. to 75 c. c. and was accompanied by sneezing and a severe coryza lasting 24 to 48 hours. With 30 c. c. the reaction was practically nil.

In my own case my weight being 170 pounds, and being in fairly good health, I had a reaction with temperature of 102.5 and slight nausea for 48 hours after an injection of 50 c. c. This is exceptional with so small a dose.

In many cases there is no perceptible reaction to such small doses as 50 c. c.

INDICATIONS FOR TREATMENT BY ISOTONIC SEA WATER.

On this division of the subject Quinton writes the following, which we translate freely:—"We have today in the organism a veritable marine aquarium, a conception which was wanting yesterday. An organism is composed of living cells, all situated in contact with a liquid, which we have called their vital medium and which is a marine liquid.

"Let us imagine a culture tube and in this culture tube sea water; in this sea water and growing there organic cells; there is the scheme of an organism. If we remember the importance for a culture of the liquid in which it grows, we behold the rank which sea water therapeutics can take in all cases where the culture liquid of the organic cells (vital medium) is vitiated for any cause whatsoever, chemical or microbe poisoning, insufficiency of the emunctories, defects of certain elementary products, etc.

And so he tried it in some acute cases of particular gravity, infectious gastro enteritis of undetermined nature, poisoning by oxalic acid, erysipelas, etc., and the success was immediate and complete.

In precocious and malignant syphilis and cutaneous tuberculosis, cicatrization of the ulcers promptly occurred under administration of sea water.

RESULTS OBSERVED AT THE MARINE DISPENSARIES IN PARIS IN 1909.

In my visits to the Dispensaires Marins of Paris I was cordially shown the patients, and a large number of photographs and chemical histories. The cases in which they seemed to have greatest success were those of gastro-enteritis and marasmus, those conditions formerly classed as scrofula, tuberculosis in all forms, rachitis, anaemia, dysmennorrhoea, constipation, varicose ulcers, neurasthenia and many skin diseases, especially eczema, psoriasis and lupus.

Some of the results in gastro-enteritis and marasmus in children seemed almost miraculous, and the transformation in their appearance in a month's time seemed hardly credible. Improvement began within a day or two, and though the children were at once put on their regular diet, the functioning of the stomach and bowels seemed to improve very rapidly, and in a month or six weeks, old-looking, scrawny, dried up marasmic babies at the point of death and living under most unhygienic conditions, often became plump and well.

The pain of dysmennorrhoea was relieved very promptly. Constipation was improved and often cured by this method. Old tuberculosis sinuses in joints and bones, as well as varicose ulcers, were healed after a few weeks or months without the intervention of operations and without local treatment. Many cases of eczema, particularly in infants, promptly improved and were finally cured, as were a few cases of psoriasis, while the results in lupus seemed to rival those at the Finsen Institute in Copenhagen, though the number treated was very much smaller.

In our personal experience in the use of sea water during the past three years we have met with considerable success and some disappointment. No case has been injured by the treatment and many have been improved. While my therapeutic practice has been limited to dermatology, I have directed the treatment of some hospital cases suffering from various diseases other than those of the skin where it seemed to me the treatment was indicated and where I wanted to prove up what I saw in Paris.

We have used sea water as an adjuvant or alone with more or less success in the following diseases: Eczema, psoriasis, pityriasis rosea, lupus vulgaris, mycosis fungoides, epithelioma of the skin and cancer of other organs, tuberculosis of glands and joints, gangrenous dermatitis, dysmennorrhoea, infectious eczematoid dermatitis, acne vulgaris, seborrhoeic dermatitis, rosacea, tertiary syphilis, varicose ulcer, keratoderma, erythema multiforme, T. B. of skin and bones, purpura simplex, general pruritus, urticaria facitia, etc.

We have treated one case of lupus vulgaris of the face by a combination of sea water and Finsen light. The case was a young woman, 23 years old. She had had the lupus for several years, had been operated upon one year previously for tubercular peritonitis and had quite large tubercular cervical glands. Two treatments with Finsen light were given ten days apart. During this period she also had subcutaneous injections of sea water, about 75 to 100 c. c., twice a week. At the end of ten days the lupus was almost healed and in three weeks no characteristic apple jelly spots could be detected in it. The sea water was continued for eight months and X rays given the tubercular glands. The latter improved rapidly, but two remained about the size of a pea and a bean, respectively, for over a year, the X-ray being given them occasionally. The patient gained much in weight, and after two years there has been no relapse of the lupus.

Results of treatment of lupus with the Finsen light after a long experience in Copenhagen and in my private practice, while gratifying, are not usually so prompt and perfect as in this case, so that we feel justified in ascribing a large part of the victory to the sea water.

A young woman, a music teacher, 20 years old, had suffered with pityriasis of the face for a couple of years. She was badly nourished and overworked; she was very nervous and suffered severely from dysmennorrhoea, being confined to bed the first day or two each month. She had had a curettage without gaining any relief. She began taking sea water two weeks before her menses were due. She was given 50 to 75 c. c. every third day. The next menstruation was so nearly painless, she kept at her work during the whole period. Subsequent menstruations for about a year and a half were almost wholly free from pain. She has not reported for over a year. The pityriasis was much improved, though she had some local treatment for that, and her general condition was very satisfactory, after about three months treatment. The treatments were continued off and on for 13 months, 67 treatments in all being given.

Four cases of psoriasis were treated by sea water. One, an acute general exacerbation, promptly subsided in six weeks' treatment with doses of 50 to 100 c. c. of fresh sea water twice a week. She was not cured, however, when last seen, and there were still some slight scaly patches on the elbows. Two others showed marked improvement under injections of a pint to a pint and one-half of sea water, three or four months old, at irregular intervals of 10 days to two or three weeks. But these cases have been under treatment off and on for about two years, and though not cured, still take a treatment occasionally when the eruption is troublesome. A fourth case did not appear to be influenced very much by injections of 75 to 150 c. c. of fresh sea water twice a week during several months.

A rare case of dermatitis gangrenosa with gangrenous patches on the abdomen, breast, neck and thigh in a thin, neurotic, poorly nourished girl of 20, was apparently cured after treatment irregularly for about a year. The gangrenous patches followed a carbolic acid burn of the finger five years before, and came and went at intervals of a few weeks for four years before she began this treatment. She was given doses of 75 to 150 c. c. twice a week.

In three cases of pityriasis rosea, the eruption began fading after the second or third injection of 50 to 75 c. c. of fresh sea water, and disappeared completely in three or four weeks.

In a case of tubercular wrist of 14 years' standing in a man 75 years of age, a complete cure was brought about in three months.

In some cases of extensive eczema I have noticed general improvement, but have not treated any case by means of sea water alone.

In a case of inveterate syphilis which was tabetic with gastric crises, and which was rebellious to both salvarsan and mercury, there was very marked and rapid improvement, not only in the tabetic symptoms but in the extensive papulo-squamous syphilide.

In several cases of advanced cancer, the pain was decidedly relieved by subcutaneous injections of sea water, and a temporary improvement in the general condition of the patient.

In conclusion I will say that theoretically sea water, the marine medium, being the original "vital medium" of animal cells, should, under proper precaution, be harmless if injected into the animal economy. In practice this is true. Except for the temporary reaction I have known of no serious results from its use.

In these days when we witness such marvelous, rapid and complete cures as are made through the blood by anti-toxic serums,

such as that for diphtheria, anything which is not so absolutely certain in its results is apt to be regarded with indifference or skepticism. However, we have used other remedies in diphtheria with success for many decades, so in many diseases which baffle us we must use anything which promises better results than we have had heretofore, even if it is not the specific we most strongly desire. Sea water alone or in combination with other treatment, will cure or materially improve many cases in the treatment of which we have hitherto been unsuccessful.

And in most cases where the results most desired are not secured, it greatly improves nutrition and the general condition, which is a long step forward.

It is a therapeutic agent which is deserving of more general recognition and investigation.

623 Stevens Building.

December 16th, 1912.

GLYCYL TRYPTOPHAN TEST FOR GASTRIC CARCINOMA.—Neubauer and Fischer, *Munch. Med. Woch.*, 1911, page 674, vol. 58, claim that normal gastric juice does not split this substance and that cancerous juice almost invariably does, basing their statement on a series in which 75% were verified clinically and 84% by necropsy. Austin, *Med. Rec.*, 1911, vol. 80, considers this test the most available clinically. On the other hand, Weinstein, *Jour. A. M. A.*, 1911, vol. 57 page 1420, holds that gastric contents practically always contain proctoses and peptones that are convertible by the cancer enzyme into tryptophan, among other cleavage products. I. Walker Hall and Scott Williamson, *Bristol Medico-chir. Jour.*, 1911, vol. 29, page 96, and Smithies, *Jour. A. M. A.*, 1912, vol. 59, page 539, think that the test may merely indicate the presence of blood serum which is, of course, especially frequent in cancer while, in ulcer, the presence of larger amounts of blood would obscure the test.

HOOKWORM DISEASE IN ANCIENT EGYPT.—Walter H. Page, *World's Work*, September, 1912, states that hookworm disease was described in Egypt in 1833, but that a very good clinical description of the disease has been found in a papyrus almost 3500 years old.

CHORION-EPITHELIOMA OF THE FALLOPIAN TUBE.—Jeanne-
ret, *Rev. Med. Suisse Rom.*, May 20, 1912, reports a case developing after extra-uterine pregnancy. He found only ten tubal cases in literature, the first by Marchand in 1895.

Factors Entering In the Maintenance and Control of Free Dental Dispensaries*

By WM. W. BELCHER, D.D.S.,
Rochester

Editor of *Dental Dispensary Record*

ASSUMING a free dental dispensary as essential to the well being of those sadly needing services and unable to pay, under whose auspices should it be established and by whom controlled?

Shall it be that of a private charity, the local Society for the Prevention of Cruelty to Children, the Society for the Prevention and Control of Tuberculosis, the Health Association or the local Health Officer?

Under these conditions, the dentist is called in and his services paid for and the charitable organization determines the worthiness of all applicants.

Shall the local School Board establish the free dental dispensary as a part of its fight in securing a whole body and a whole child as a teaching factor? In this case, the work is oftentimes associated with the eye and ear, the nose and throat clinic with an economy of operation. The teacher or school nurse determines the worthiness of applicants. The dental operator is asked to supply the services and when the worthiness of the work is demonstrated, the funds for maintenance is added to the school budget and is a part of the school work.

Shall the free dental dispensary be established by the municipality or supported in part by municipal moneys? This is really where the burden belongs and the plan of the work in Germany, in a large degree, and it is here the dental dispensary has been most successful and longest established.

Atlanta, Ga., is about to try a new plan—new, at least, to the essayist. The local Board of Trade have asked the dentists of the city to establish a free dental dispensary for the worthy poor school children. This insures continued financial support and a maintained interest from the best citizens of the community.

Finally, shall the dentists themselves establish their own dispensary; receiving full credit for the work and determine the worthiness of all applicants as best they can? Shall they finance and manage their own charity?

To do this it will be necessary to call on the public for support. The Dental Society must supply enough volunteer operators or employ a paid operator, and each pledge himself for the amount necessary to reimburse the dental interne and the dental nurse. Then there are supplies and other essentials that will average from 15 to 20 per cent. of the total expenses. If the local dentists are to finance and manage their own charity, where

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are the funds to come from? Who is to manage these dispensaries? Every day new problems present themselves. They must be decided at once. Who is to do this? By what means and methods are you to determine the worthy from the unworthy, that your charity shall not be a reproach to your society and the community? Gentlemen, these are important questions and not to be lightly passed on. On their wise decision depends in a large degree the success or failure of the work.

Every plan enumerated has its good points and its weak ones. Some of these I will hurriedly touch on and so not tire you with a mass of detail. When a man gets interested in a subject, he is apt to confuse his hearers with a mass of detail, all important to his mind and essential in the proper presentation of his subject.

A specialist in the study of the wagon wheel could write a book on the subject. Who invented it? Nobody knows. The wagon wheel along with the dog and the family cat have been with us since we have any record of man. But the hub with its bearings of steel balls or hardened steel rolls, and again, the spoke of wood or wire, of such and such a dimension, of such a number and tensile strength. And the tire, who invented the tire? Of wood, of leather, of steel, of rubber. Solid rubber at first and then with its cushion of air, with its inner tube and without. And then the rim. Removable rims of different types. What a discussion presents itself to even the untrained mind. Of course the specialist could write a book on the subject.

To avoid these errors, I will have to confine my remarks to two aspects of the subject of free dental dispensaries and regret that it should not be only one.

Let us take up first the municipal establishment and control. This is the goal we are all striving for, and at first glance seems the most desirable; under proper restrictions I think this is true, but, alas! there is a fly in the ointment. After having established a free dental dispensary and educated the public and school authorities as to the necessity and desirability of the work of caring for the teeth of the worthy poor who are unable to pay, it would almost seem our troubles had ended, but, unless careful planning has been done, they have only begun.

Let me introduce to you this colored gentleman in the wood pile. Carefully remove each stick. He is a very elusive mortal and not so easily located. His name is Ebenezer Erastus Politics. Yes, here he is; we have successfully uncovered him. Let us examine the rascal at our leisure and in daylight. He is a likeable fellow. He is acquainted with most of your friends. He has done you many a favor and stands ready to do you more. He has a "machine" cunningly devised and far reaching in its workings. Sly as a fox, wise as an owl, and like them both

combined, he sees in the day time and in the darkness of the night.

Let me illustrate my position by the story of one of our local charities. It has been fairly well managed in the past and dependent on the public for support. Using its influence with the powers that be, it succeeded in getting an appropriation of \$2,000 of the municipal funds. In addition to this they had a "Flower Day" and all the political bosses, from the man "higher up" to the employee who shovels the coal, helped to boost, and the daughters and wives went on the streets of our city and accosted the men they knew and those they did not know with an appeal to purchase a flower for the support of the charity. You paid ten cents or ten dollars for a dinkey flower which the lady tucked in your buttonhole, the amount depended on your charitable spirit or the impression you wished to convey to the fair peddler of flowers. Do you approve of this means of raising money? I do not. A "Field Day" with the politicians and others figuring in ball games and various contests followed. From these combined sources the sum of \$8,000 was realized.

One of our free dispensaries is housed in the same building with this organization, although it is entirely separate, and none of the funds are used to support the dental charity, other than the furnishing of a room with heat and light, the same courtesy we receive from the public schools where are located two of our free dispensaries.

Comes the director of this organization to the dentist in charge of the Dental Dispensary and says: "This child is sent to have her teeth attended to by Commissioner Blank. I wish you would fill her teeth without investigating the case as Commissioner Blank is a good friend and supporter of our work." The politician who has played baseball, who has allowed his daughter and his wife to go out and raise money for the organization, has a washwoman whose children's eyes need attention. "Can she get relief at the dispensary?" Sure thing. I'll write you a note and it will be O. K. The director knows me and the kid will be attended to P. D. Q." The washwoman has a piano in the front parlor. Her husband is employed and their home is paid for. She is a taxpayer. Does the director investigate? Nix. That charity has gone to the bad. It isn't a charity any more. This matter of paying taxes is considered a privilege for aid at any municipal supported charity. We have had this argument used by a woman with an only child bedecked with fine linen and fancy hair ribbons. Her daughter was refused treatment. She waxed wroth. She had a right to have her daughter's teeth treated. Wasn't she a taxpayer! She was told that none of her tax money supported the dental dispensaries, and the fact of her being a taxpayer was one of the strongest arguments she could offer against the free treatment of her child.

These conditions are not a fairy story, it is a factor in every dispensary receiving municipal support that I am acquainted

with. What is the result? The reaction is coming and the city fathers, learning of these things are about to curtail the appropriations for support. They, themselves, or part of them, may have been guilty of the acts they condemn in others, but that does not help matters.

Here is a part of a letter recently received from a prominent practitioner who is interested in the free dental dispensaries of his city which is receiving municipal support: "I was called on to-day by a very influential Councilman, who told me there has developed a good deal of opposition to our free dental clinic. The complaint is that too many children are treated there whose parents could well afford to pay for regular dental services. In this way too few of the worthy poor receive attention.

"How do you manage in other cities to keep out the well-to-do? You probably have some plan and I should like to learn of it. The annual city appropriation here is over \$9,000, and there is talk of cutting this amount materially. We must prevent it if we can. Give us some help and promptly so as to save the day."

Now, I don't know the local cause of this upheaval, but I can guess, and unless part of the money appropriated is used to employ some one with a stiff back bone and absolutely indifferent to personal influence, who is of good judgment and both sane and sensible, with funds for special investigations, the Dental Dispensary in this city had better close its doors as a *charity*.

I do not blame these gentlemen who expect favors. It is only human nature. I consider our city of Rochester a well-governed city with an absence of any big grafting schemes. I have never met our local boss: "Uncle George Aldrich," but I have a sneaking liking for him, and all the politicians I know are royal good fellows. Personally, I have a lively appreciation of favors extended me and if I were in politics I am afraid I would be a very weak sister when it came to refusing favors to a man who had befriended me. But it isn't a matter of men; it's a matter of principle. A political "charity" is an impossibility. They won't mix any more than oil and water.

Passing for a time the municipal dispensary we will consider one under the control and supervision of the dental profession. If you will pardon the personal part, I know of no place where this is done in its entirety as at Rochester, N. Y.

In the beginning, this work was supported by the gifts of our patron, the late Capt. Henry Lomb, and the equipment in our three dispensaries has been very largely donated. For the past five years it has been supported entirely by voluntary contributions from the public, our Rochester Dental Society and the production of two theatrical entertainments. The production of these has been somewhat strenuous and it has been questioned if the same effort expended in other directions might not be more productive. Perhaps this is true, but the character of these entertainments have been of such a high order and the advertising of our work so effective that we look upon the direct proceeds as only part

of the compensation. The added publicity through the press is perhaps worth all the effort expended, outside of any financial gain.

The management of the work in Rochester is in the hands of the Board of Directors, seven in number and one honorary member, the essayist. This board attend to all the routine business of the society and looks after the free dental dispensaries. They elect their own chairman and appoint a dispensary committee, one man to each dispensary. He is held responsible for the dispensary under his control. All requisitions for supplies are made out to him. He furnishes the reports and is supposed to make frequent trips to the dispensary to see that everything is working smoothly. The board elects its own secretary, who keeps the minutes of the meetings, and also a treasurer, who is under bond and has the keeping of the dispensary funds. He makes out a report every two months of the sums paid out and the balance in his hands. Thus, the dispensary funds are kept entirely separate from those of the society. The DENTAL DISPENSARY RECORD is published by the society, but it has an entirely separate organization and its own funds and treasurer. Each part of our organization is kept separate and stands or falls on its own merits.

Now comes the question, "How do we guard against unworthy applicants?" In the first place, we are chartered and under the supervision of the New York State Board of Charities. Each applicant makes out a card as to their family history and the total income. This is sworn to and they are issued a card with a penalty clause on the back reading as follows:

PENALTY FOR FALSE REPRESENTATIONS.

Section 25, Chapter 368, Laws of 1899.

Any person who obtains medical or surgical treatment on false representations from any dispensary licensed under the provisions of this act, shall be guilty of a misdemeanor, and on conviction thereof shall be punished by a fine of not less than ten dollars and not more than two hundred and fifty dollars.

(Imprisonment until fine is paid may be imposed. Code Crim. Pro. 718.)

In conducting a charity you must have some rule as to the total family income. We have placed this at \$2.00 per member. Thus, if a family of mother and father and three children apply for services and their income is \$10 per week they are admitted if the investigation shows they have told the truth. This is rather a meager income and it has been said that it favors the foreign born population rather than the American born. This rule is not an arbitrary one. If the family have sickness: if they are handicapped by debt or the father is temporarily out of work or a dozen other reasons, they are admitted if, in the judgment of those in charge, the case is a worthy one. With us

it has not been always who was worthy but who was most so. We have been driven with applications from children who sadly needed attention and the problem has been at times to select the most worthy.

How do we determine the worthiness? We call up the employer, the family physician. Best of all, we have the United Charities Association. This is a Rochester institution and is a clearing house of information for those who have applications for charity. They have an office and a trained force compiling information. In addition to this, they have correspondents in over 200 cities of the United States. Over 40,000 names of people asking charity are on the books of the association. You call up the central office and they give you the names, one, two, three—perhaps a dozen charity organizations who have been in touch with the family, and the report of their investigator is given you. It may be any one of forty charity organizations who are reporting each case that comes to them for aid or relief. We make these investigations ourselves. The school dental nurse has funds to use for the payment of car fares, etc., in making investigations. Then there is the school nurse and the teachers who are in close touch with the family, but even they are deceived occasionally. A Polish or Italian family are in apparent destitute circumstances. They live in two rooms and take in a lodger. Children everywhere. They have no rubbers, so must stay at home; no shoes, so must remain home; no school books. The kind-hearted teachers see that their wants are supplied. The first thing you know this destitute family have purchased a row of houses or a hotel. The paterfamilias has a roll of money that would choke a horse. This is a free country and everything in it is free to these people, and if they can fool you and secure charity it is considered a mark of cunning, and the only disgrace is in being found out. Yes, we have these cases and some others, and we don't know how to eliminate them, but the children have been benefited even if they have fooled you. They didn't come to the dentist until they sorely needed the services and would rather break into jail than try it again.

Shall a charge be made for services rendered? At Newark, N. J., they have tried making a nominal charge for each filling, but it has not worked out satisfactorily; some can pay absolutely nothing. The practice abroad is mostly free services to the worthy poor. About one-quarter of the German dispensaries make a small charge. In some cases it is .05 mark per filling, in others a charge of from 1 to 2 marks are made for annual treatment. Thus a child pays either 25 cents or 50 cents and receives a card good for a year's treatment at the Free Dental Dispensary. A charge of 50 cents would pay a large part of the running expenses of a dispensary once it was established.

In Rochester it has cost for the past three years from 59 cents to 69 cents for each child; this covers all expenses, including postage and printing. A charge of 50 cents would go a long ways in meeting these expenses, and I am inclined to think that no family is too poor to meet this small fee, and if they could not, then some one interested in the family would furnish the wherewith. Indeed, funds for these cases would be donated. It is a rare thing for any one to value services for more than is charged, and among the ignorant poor, particularly the foreign element, I think the effect would be good. We have had no practical experience in this matter and my views are entirely theoretical. We have been taking care of the teeth of the worthy poor for over seven years, and it will be our eighth anniversary in February. Municipal support that we can accept seems as far off as when we entered upon the work. The public are intensely interested. We have loyal friends and supporters and the time will come when the work will be taken up by the city or the school board and carried on under our supervision and control.

In Genesis, xxix chapter, xx verse, we read: "And Jacob served seven years for Rachel; and they seemed unto him but a few days, for the love he had to her." The paterfamilias must have liked his brand of work and wanted to retain his services. He sold the unsuspecting Jacob a lemon in the shape of his elder daughter, Leah, and Jacob, so it is said, didn't know the difference till the morning. So he served seven years more and at last Rachel was given to him. It's dollars to doughnuts Jacob made sure long before dawn, that he had not been made the victim of a cheap political trick a second time.

We have served, like Jacob, seven years, and are on the second lap of seven more; we want municipal support, but if it has to come through politics then I, for one, will be willing to see our charity work go down and out. God knows how hard we have worked. Some of us have neglected our business and given the best that was in us to make it a success. Rather abandon it than it a political prostitute posing as charity.

TREATMENT OF SHOCK.—Edgar A. Vander Veer and J. L. Bendell, Albany (*Journal of Obstetrics*, October, 1912). These authors (contemporaneous writers in other journals ditto) deprecate wild and indiscriminate use of drugs for post-operative collapse and shock. They, in common with others, agree that the stimulant armamentarium of the surgeon should be: 1. Saline infusion; 2. Morphine; 3. Camphor oil; 4. Adrenalin, of importance in the order maintained. Other drugs, as strychnine, atrophine, digitalis, nitroglycerine, bandy and musk are of value notwithstanding.

Dens Sana in Corpore Sano

By WM. BRADY, M.D.

1008 Lake Street, Elmira, N. Y.

IT is a long step in evolution from the low browed, heavy jawed aborigine with a full complement of molar machinery to the modern brain worker with scant room in his mandible for the eruption of the wisdom teeth. In the lower races and in atavistic types of our own race the jaw protrudes beyond the perpendicular brow line; in the Caucasian race the jaw is on the perpendicular, and in degeneratives the jaw frequently falls behind the perpendicular. Civilization varies as the square of the jaw—with a few old roots thrown in.

One or even all four of the third molars are missing from the jaws of forty-seven per cent. of adult Americans, and the lateral incisor is missing in six per cent. Civilized man no longer burdens his digestion with the crude materials supplied by Nature for the building of strong teeth. Impacted molars, troublesome wisdom teeth, dental caries, and interstitial gingivitis are Nature's expressions of protest against the refinements of our modern diet.

Two essential elements in the building and conservation of the teeth are lime and phosphorus. The source of these elements is largely vegetable. The cereals, fruits and certain green vegetables which can be eaten raw furnish calcium, phosphorus, iron, potassium, magnesium, silicon and chlorine in the most assimilable form.

The "Staff of Life" was so named long before the days of refined white flour. The apology for bread now in popular use does not furnish the blood, bone and tooth making material which health demands. The mills of Minneapolis grind slowly but they grind exceedingly fine—fine enough to remove the layer of mineral food from the wheat kernel and leave little more than devitalized starch. Our daily bread leads us into constipation but it does not deliver us from anaemia and carious teeth. While awaiting the advent of more Horace Fletchers crying in the wilderness we should teach our patients to compensate the deficiency of mineral matter—the mineral starvation, by eating freely of raw cabbage, lettuce, onions, celery and fruits, articles of diet which also effect a saving in tooth brushes.

Oral sepsis from carious teeth is so common that we are apt to overlook its far reaching influences upon the general economy. How much tuberculosis results from carious teeth we can but surmise. We know that many children are infected via the cervical lymph nodes as a direct sequence of neglected oral hygiene,

and we know that the bronchial glands may subsequently become involved in such cases.

The relation between septic states of the mouth and disease of the tonsils and adenoid tissue of the pharynx is a subject of debate. The stomatologists attribute the primary role to the carious teeth, while the laryngologists insist that the dental caries is induced by infection from the diseased tonsils. Adenoid hypertrophies likewise cause or are caused by defective dental and palatal development. In some instances removal of the adenoids and tonsils fails to overcome the nasal stenosis unless the dentist works in conjunction with the physician; a jack-screw appliance inserted and worn, under the dentist's care, for several weeks, spreads the palate arch, gradually brings it down, permits nasal expansion and thus prevents the recurrence of the adenoid tumor.

The entire subject of oral hygiene is beautifully summed up in Goadbey's recent Hunterian lecture:

"Lowered vitality favors the vegetation of microorganisms in the mouth; these attack the teeth, and the diseased teeth still further lower vitality so that a vicious circle is established."

It is the physician's duty to attack a vicious circle from every corner, if I may so put it. A simple anaemia, sometimes perhaps a pernicious anaemia, requires not only hematinics but also diet and treatment directed toward the frequently present carious teeth or pyorrhoea alveolaris. An atrophic gastritis or an intestinal autotoxemia very commonly has its origin in the mouth and will not radically improve without due attention to oral sepsis. I have never seen a case of chronic rheumatoid or metabolic arthritis that did not also present a chronic gingivitis, and I believe that the same chronic toxemia may explain certain cases of chronic nephritis.

Oral hygiene is too often neglected in surgical practice. It is entirely logical to attribute certain post-operative pneumonias to a faulty technique in which the surgeon forgets to disinfect the septic mouth preceding anaesthesia, and so preserves a handy culture of virulent pneumococci to enliven the after history. The development of tonsillitis following a nasal operation is clinical evidence of faulty antisepsis of the oral cavity. The operator depends too much upon a simple mouth wash or gargle to clean up the old culture of pneumococci universally present in the mouth.

Talbot, who has done much research work on oral sepsis, states that dental caries may be prevented in children by painting the gums once a month with a solution of zinc iodid fifteen, water ten, iodine twenty-five, and glycerine fifty parts. If we can preserve the temporary teeth by such simple means, it will not be

necessary for posterity to place the permanent set in a glass of water beside the Seidlitz powders every night. As a personal asset a sound tooth is better than a gold crown, and a whole mouthful of good dental organs will gain for a man almost anything he desires in this country, unless it be a permanent berth in the White House.

The average practitioner scarcely realizes the importance of the mouth as a microbe factory. We know something of the diphtheria carrier, and we know something of the pneumococcus carrier, but we do not lay sufficient stress on the need of dental treatment in routine work. A periostitis or a purulent sinus elsewhere in the body invariably excites our interest, but the same conditions in the oral cavity, the most active absorbent area imaginable, are neglected merely because they are so common. This practice may have been proper enough in the old days when family doctors pooh-poohed anything less than a serious fit of sickness, but it cannot be justified any longer. The modern trend of medical science is in the direction of prophylaxis, and phophylaxis naturally begins in the mouth.

Young children should be encouraged to masticate crusts, coarse vegetables, raw fruits and the like as soon as they cut their milk teeth. The baby should be allowed to gnaw at a bone whenever he is so inclined. The schoolboy should be allowed to crack nuts with his teeth to his heart's content. These habits give nourishment and exercise to the developing teeth and jaws.

In the evolution of the mandible, the result of dietetic selection, we find an explanation for the increasing prevalence of pyorrhoea alveolaris or interstitial gingivitis.

Oral hygiene means conservation of the teeth and a great deal more. I am sure I have witnessed general improvement of the health of children who receive good dental care at the free clinic established by the Elmira Dental Society. And I have repeatedly "diagnosed" a dental cavity from the noticeable disturbance of general health that caries invariably produces in my own children. The reason we do not recognise the intimate relation between decayed teeth and physical deficiency is that we do not have the opportunity to observe the sequence of symptoms intimately, as one has in his own household.

The race should return to whole wheat bread. The profession should preach the doctrine of Mr. Horace Fletcher and consistently follow the preaching by prescribing the correct diet. At least two great mills are marketing a whole wheat flour that makes a very palatable bread. We have the reason, we have the means; all that remains for us to do is to prescribe. The last word in oral prophylaxis is Fletcherism.

Clinical Report of Cases Treated With Phylacogen*

By F. C. SMITH, M.D.
Keokuk, Ill.

Having been invited to present to the members of this Society a report, embodying my experiences with Phylacogen, it gives me pleasure to offer the following report:

The following is my experience with five cases:

One acute muscular rheumatism, cured.

One gonorrheal arthritis, cured.

One hay fever, not benefitted.

One arthritis, not benefitted.

One gonorrheal orchitis, cured.

These cases briefly are as follows:

Case No. 1.—Acute Inflammatory Rheumatism, J. F. P., age 38, male, married; occupation, traveling salesman. Has suffered from repeated attacks of acute inflammatory rheumatism, complained of attacks occurring in one joint and then in another, not confined to any one locality. In each instance attended by swelling, pain and fever, typical symptoms of acute inflammatory rheumatism. The treatment with Rheumatism Phylacogen was first instituted April 12th, 1912, with 5 c. c., given under the skin. This dose repeated on the next day. On the third day 10 Cc. were given, followed by 10 Cc. on each of the three succeeding days. Six injections were given, no decided reaction was noticeable. The temperature was generally around 100 and a fraction before injection. I did not see the patient for two hours and a half after the sixth injection, at that time he had passed reaction, his temperature was 102 $\frac{3}{5}$, patient had a very profuse perspiration and seemed prostrated. The family were much frightened at the reaction and from what they stated it appeared that he had a heavy chill with high fever and was somewhat cyanosed. Patient had been confined to bed for some time, but the next day, after the sixth injection, was up and around the house. He refused further injections, claiming that he was completely relieved.

Case No. 2.—Patient L., age 28, male, married; occupation, locomotive fireman. This patient previously had an attack of acute specific urethritis which was later followed by the involvement of the knee joints which became much swollen and so painful that he was unable to use them, motion being very painful, his temperature ranged from 100 to 102, his knees were badly swollen and he was confined to bed, diagnosis was Gonorrheal Arthritis. On July 6th, 1912, Gonorrheal Phylacogen was administered in a dose of 10 Cc., repeated every day until July

* Read before The County Medical Society, Fort Madison, Ia.

17th, a total of 120 Cc. being given, and then every second day until 70 Cc. additional had been administered. This patient then received in all 190 Cc. during twenty-five days, at which time he was discharged with complete relief of all symptoms.

Case No. 3.—Patient A. A., age 28, male, married; occupation, laborer. Gave history of a previous attack of specific urethritis with involvement of the left testicle. When the patient presented himself this organ was swollen, tense and very painful. With the previous history and the symptomatology it was not difficult to make a diagnosis of Gonorrheal Arthritis or Epididymitis. Gonorrhea Phylacogen was administered in 3Cc. doses night and morning for two days, increased on the third day to 5 Cc., night and morning. For the first three days there was some rise in temperature, the highest point being $102\frac{3}{4}$. Continued the treatment for four days longer with no more reaction. The swelling of the testicle subsided rapidly and this condition was completely cured. The acute urethritis, however, persisted.

Case No. 4.—Patient R. R., age 44, male, married; occupation, clergyman. Gave a history of having hay fever every year. On July 23rd presented himself with the typical symptoms of hay fever, at which time 5Cc. of Mixed Infection Phylacogen were given, followed by 10 Cc. on July 24th. There was some reaction following these two injections, but no benefit. The patient received no further treatment and the case was not cured. It should be understood that "One swallow does not make a Summer," and it should likewise be understood that no distinct claims have been made as to the definite cure of hay fever with Phylacogen. One naturally hesitates to discuss hay fever with a biological product like Phylacogen because of the ideas which have prevailed in the profession concerning the cause of hay fever. I am informed that a number of physicians throughout the United States have reported a large number of cases of hay fever as symptomatically cured by the use of Mixed Infection Phylacogen. At first these cases were being treated with 5 and 10 Cc. doses; the reaction, however, alarmed some of the patients with the result that the experiment of giving small doses was instituted, and this has resulted in diminishing the reaction quite decidedly and enabling the patients to persist with the treatment for a sufficient length of time, the net result has been that a very large majority of the cases have been relieved, so it is reported.

Case No. 5.—Patient A. A., age 29, male, married; occupation, Cabinetmaker. Four years ago patient noticed a swelling in the popliteal spaces which gradually increased and interfered with

flexion of the leg. When the patient consulted me there was a large swelling of both knee joints, considerable pain on motion, the joints were hot and tender, the patient was unable to walk without crutches, the patient denied any specific infection. A provisional diagnosis was made of arthritis and Rheumatism Phylacogen was administered, beginning on July 6th and continuing every day until 170 Cc. had been given, followed by no reaction, except on July 15th, when the temperature rose to 100 $\frac{2}{5}$, when the treatment was discontinued.

In addition to the above I will give a summary of cases not included in my original report.

Fourteen cases as follows:

Seven cases Orchitis and Epididymitis.

Five cases cured.

One case benefitted.

One case not benefitted.

Seven cases Rheumatism.

Four cases cured.

One case benefitted.

Two cases not benefitted.

This necessarily brief clinical experience is related for the purpose of stating what I have personally observed in the treatment of certain conditions with this new remedial agent. Phylacogens are not bacterial vaccines or antitoxins, as we ordinarily understand these terms. They are somewhat similar to bacterial vaccines, in that they are sterile aqueous solutions of certain, at present unknown, metabolic substance or derivatives generated by bacteria when grown in artificial media. The germs are killed and then removed by filtration through porcelain, the filtrate is sterile and to insure this Phylacogen is subjected to careful cultural tests.

The Phylacogens are made from a large variety of pathogenic bacteria, such as the several staphylococci, *Streptococcus pyogenes*, *Bacillus pyocyaneus*, *Diplococcus pneumoniae*, *Bacillus typhosus*, *Bacillus coli communis*, *Streptococcus rheumaticus*, *Streptococcus erysipelatis*, etc. This basic Phylacogen is a "polyvalent" preparation, or Polyphylacogen since the organisms are not from one strain only of a given species, but from cultures made at frequent intervals and from a variety of sources. The various organisms are present in the material before filtration and dilution in approximately equal proportions. The cultures are incubated at 37° C. for 72 hours or longer, after which a preservative consisting of 0.5 per cent. of phenol is added to the fluid, which is then filtered through porcelain. The basic Phylacogen, made in this manner, is used in the prepar-

ation of the several specific Phylacogens. It has been named "Mixed Infection Phylacogen."

Each specific Phylacogen is prepared as follows: The basic material (Mixed Infection Phylacogen) is modified by the addition of an equal amount of the filtrate obtained by growing and treating the organism considered to be predominant in the pathological condition to be treated, for instance, in the preparation of Gonorrhea Phylacogen, the gonococcus is grown and treated like the several organisms entering into the preparation of the basic Mixed Infection Phylacogen. The filtrate obtained from the preparation of the gonococcus organism alone is added in equal amount to the Mixed Infection Phylacogen, and the resulting product given the specific name "Gonorrhea Phylacogen." A similar method is employed in the manufacture of the other specific Phylacogens, such as Pneumonia, Erysipelas, etc., etc.

Phylacogens were originated by Dr. A. F. Schafer of Bakersfield, Cal. Dr. Schafer presented his method of preparing Phylacogens and his technique of their application to the San Joaquin Medical Society in Fresno, California, in October, 1910, and later to the San Francisco Medical Society, January 14, 1911, and published a preliminary statement in the Therapeutic Gazette for April, 1911.

Since the appearance of Dr. Schafer's article a number of physicians have reported their experiences, entitled the following:

No. 1. "Results Obtained With Modified Vaccines," by L. D. Green, M. D., San Francisco, Cal.; published "Cal. State Jour. of Med.," April 12th, 1912.

No. 2. "On Gonorrhea Phylacogen," by G. K. Swinburne, M. D., New York, N. Y.; published "New York Med. Record," May 25th, 1912, page 975.

No. 3. "Schafer's Treatment for Rheumatism," by G. C. Crandall, M. D., St. Louis, Mo.; published "Mo. State Med. Jour.," June, 1912, page 492.

A large number of other papers have also been printed, the consensus of opinion being that Phylacogens mark a new era in the treatment of infections and also that many more conditions are due to infection than have previously been suspected or proved.

THEORY: THE VIEWS OF DR. SCHAFER.

The principle upon which the use of these Phylacogens is founded is, briefly, the theory of multiple infections. This principle is supported by an extraordinary practical experience, supplemented by exhaustive and long-continued clinical experimental work by Dr. Schafer.

Three facts are set forth by Dr. Schafer as the basis of this new therapy.

First: Practically all acute and many of the chronic diseases are caused by the metabolic products of bacteria.

Second: The human subject is the host of micro-organisms that are pathologically latent but capable of setting up a disease process under certain conditions.

Third: The growth of infecting micro-organisms can be arrested and their effects neutralized by products derived from their development in artificial culture media.

Dr. Schafer is of the belief that all infections are "Mixed Infections;" that except in rare instances there is no such thing as an infection by a single species of micro-organisms; that while one species may predominate, the pathologic process engendered by it is accelerated and intensified by the presence of organisms of other species; in other words, that in the course of an infectious disease the symptoms are due not only to the effects of a single species of organisms (the specific infection), but to the influence of other organisms whose pathogenic role is not insignificant, but which must be reckoned with in any successful scheme of therapeutics.

Dr. Schafer further believes that the human subject is at all times the host of a great variety of organisms and may harbor pathogenic bacteria without harm to itself during periods of physiologic resistance at or above par and in the absence of any solution of tissue continuity. When the resistance is below par, or a solution of continuity of tissue occurs, the bacteria harbored by the human host assume pathologic significance.

Furthermore, he contends that certain diseases, as typhoid fever, pneumonia, tuberculosis, erysipelas, rheumatism and others, are objective and subjective symptomatic manifestations of the preponderance in the patient of the toxic and destructive products of the peculiar species of organism to which the etiology of the disease is usually ascribed as *B. typhosus* in typhoid fever, *D. pneumoniae* in pneumonia, *B. tuberculosis* in tuberculosis, etc., and, in addition, the symptoms are due in part at least to the destructive action of certain materials produced by complicating organisms which are always present in great variety and number.

As an illustration, attention may be directed to the now commonly accepted idea that in pulmonary tuberculosis the greatest danger to the patient, much of the difficulty of the treatment, and many of the most notable symptoms, such as loss of weight, high temperature, disturbance of circulation, purulent expectoration, destruction of tissue, etc., are due to the complicating organisms, and if the so-called "mixed infection" can be checked or eliminated, efforts may be directed against the bacillus tuberculosis

with far greater success than has heretofore been possible in the treatment of this condition.

Dr. Schnafer points to the fact that the administration of bacterial vaccines to patients suffering from infection not infrequently fails of effect because the truth of the above assumption is not recognized, especially when the treatment, being based upon the opsonic theory, consists in the use of a vaccine made from a single species of organisms isolated from the patient. Bacterial vaccines made from a single species of organism prove successful in many cases, but the multiplicity of "combined" bacterial vaccines now in use points to the rapidly developing conclusion that the great majority of patients require something more than treatment with a vaccine made from one organism; the success attending the use of bacterial vaccines made from a number of different species, even when used in cases apparently due to one species, points to the likelihood of this theory being correct.

While my own personal experiences have not been very extensive, embracing so far 19 cases, as reported, with 14 successful results and 5 failures to obtain benefit; the successes are sufficiently definite and striking to warrant the application of Phylacogen wherever indicated.

No. 310 Main Street.

FEEBLE MINDED HEREDITY.—Miss McKinnie, *Public Health* (Bulletin of Michigan Board of Health), October, 1912. The study is of the descendents of a brother and sister, the latter feeble minded, who married normal individuals. The sister had 12 children, including a still birth. Among these, four were normal and the state of one was not known. Of the other six, three were feeble minded, one alcoholic, one epileptic and one was a sexual pervert (female). The (normal) brother had one normal son who married a feeble minded woman. They had seven children, 5 of whom died in infancy or childhood. The remaining two were feeble minded girls. One of these married her feeble minded second cousin of the older generation mentioned above. From this last union, sprung 11 children. Six of these died in infancy. Of the remaining 5, three were distinctly feeble minded, one unknown and one doubtfully normal. (Note—While the high mortality in such marriages is conservative, it is questionable how much of it is due to intrinsic lack of vitality and how much to privation and neglect. For example, one feeble minded couple known to the editor, used to buy a bag of flour, make it up into dough in a tub, at once, and use the sour dough, almost to the exclusion of other food, as long as it lasted. Quite aside from the ultimate object of eugenics, think how much suffering would be saved from a few properly timed cophorectomies and ligations of the vas deferens.)

The Early Diagnosis of Pulmonary Tuberculosis

By DR. BURT R. SHURLEY,

Detroit.

UNTIL a specific is obtained the life of the tuberculous individual depends on early diagnosis and early treatment. A vast number of those infected with the pulmonary form pass through a so-called pretubercular or presymptomatic or latent period. Although we have no tuberculosis without the tubercle bacilli, yet if we postpone our most strenuous efforts until the microscope reveals the lesions the fight is often beyond us. The early forms of latent unrecognized tuberculosis demand more of our attention.

If we hope to accomplish the work of extermination of this dread disease we must constitute each physician an educational unit. He must bear the burden of this great crusade. No specialist can rob him of his responsibilities of guarding the predisposition to tuberculosis of the growing child. It is within his realm to detect the first signs of infection and upon this knowledge and acute observation will depend early diagnosis, the life of the individual, and the prophylaxis of the race.

It may be of interest to review some of the methods of examination that aid in the early detection of pulmonary tuberculosis and to outline some of the fundamental principles that are in vogue at the present time.

There is frequently a prolonged prodromal period of impaired general condition that is marked by a well observed disturbance of the usual ratio between the body weight in pounds and the height in feet, associated with a progressive loss in weight. The external chest conditions, such as conformation, limited expansion or capacity, may indicate the improper use of the pulmonary cells. The character of the pulse may give us additional evidence, such as acceleration with a relative decrease of arterial pressure, lymphatism with decidedly pathologic tonsils, adenoids, and cervical glands, frequently exist. Will power may replace automatic power. Subjective symptoms become prominent, such as general malaise, failing digestion, weakness in the knees, cough and slightly increased or hurried respiration.

This train of symptoms without careful examination, is often taken to mean, coryza, bronchitis, grippe, pleurisy, chronic pneumonia, neurasthenia, malaria, anaemia, or indigestion. When these conditions do not respond readily to treatment they should be looked upon with suspicion and investigated thoroughly.

An early diagnosis of tuberculosis can only be made and confirmed by a careful investigation of every abnormal detail connected with the past and present life history of the patient. General rules of procedure may be followed that afford some suitable classified method of investigation. These include the

clinical history, physical examination, and the laboratory. A good record blank is important. One that is practicable for office use should not include unnecessary details. The family history is particularly important from the view point of opportunity for infection as well as heredity. Later children are more susceptible to the disease, also those who follow the physical type of the tuberculous parent or his relatives. Heredity is frequently given as a predisposing cause when a case results from direct house or fly infection. Early signs should be sought, especially after typhoid fever, broncho-pneumonia, empyema, pleuritis, influenza, whooping cough, measles or pregnancy with delayed recovery.

In the history it is important to elicit the facts and details in regard to the cardinal symptoms of onsetting pulmonary tuberculosis. Many patients who will deny a cough will admit a clearing of the throat, throat trouble, or catarrh, which, on analysis will quickly assume the form of a dry, hacking, persistent cough of early invasion, the degree of which is often in direct relation to the location of the lesion, although some cases pass on to the moderately advanced stage without the development of cough.

An evening rise of temperature observed for at least three nights with subnormal temperature in the morning is of great importance. This is often attended by languor, malaise or fatigue of the late afternoon and interpreted by the patient as "the tired feeling" of the patent medicine advertisement. Loss of weight is an important sign that is often unobserved by the patient unless interpreted in terms of loose clothing.

Chloroanemia or secondary anemia may be one of the prominent conditions of the presymptomatic stage. It is extremely marked in some cases. The diminution of the haemoglobin may be out of all proportion to the loss in red cells. Henocque characterized tubercular chloroanemias by a diminished supply of oxyhaemoglobin.

Incipient phthisis usually shows the blood picture of a slight leucocytosis, a slight reduction of red blood corpuscles and a moderate fall in haemoglobin. Gastro-intestinal symptoms are often among the first to follow infection with tubercle bacilli. Anorexia may be exhibited as a gastric unrest. No food is cooked or selected properly for the patient. Light eating and fastidiousness as to dishes may be supplanted under proper treatment with a ravenous appetite and sturdy digestion.

Pain on pressure over the apices or pleuritic pain may be the earliest subjective manifestations of tubercular invasion. No two symptoms develop phthisiophobia or actually alarm a patient in a greater degree than haemoptysis and night or sleep sweats. These are often the first flat argument to the patient, his friends,

and too often to the physician that he is truly confronted with a genuine case of pulmonary tuberculosis. Early invasion with bronchial haemorrhage is practically never fatal. As an initial symptom, sleep sweats are rare. They usually mark the presence of well marked physical signs of softening or cavity formation. Hoarseness of persistent type calls for a careful pharyngeal and pulmonary examination.

The committee of education of the American Medical Association has realized that too much special surgery was taught in our medical colleges and the curriculum has been changed to the great advantage of the student. Physical examination and diagnosis are now taught in sophomore, junior, and senior years and time of actual demonstrations in this essential and fundamental branch of internal medicine has been given the importance it deserves. More errors in the diagnosis of pulmonary disease occur from careless examination than from lack of knowledge or ability of the practitioner.

There are certain general rules of physical examination that must be observed. It is unsafe to render an opinion on pulmonary disease until the patient has been stripped to the waist and anterior, posterior and lateral areas, have been carefully examined by the various methods of inspection, palpation, percussion, and auscultation. It should be kept in mind that the earliest physical signs are generally manifest in the posterior right supra-clavicular region. Inspection may show lagging of an affected area on deep inspiration. The acromial end of the clavicle may be lower on the pathologic side. Retraction or depression may be apparent. Inspection will reveal characteristics of size and shape of the chest, conditions of symmetry and comparative mobility, respiratory movements including the prominence or retraction of the intercostal spaces and peculiarities of motion in the diaphragm. Rate and character of respiration. Unilateral wasting in the supra-scapular region.

Palpation gives us information in regard to enlarged cervical axillary and epitrochlear glands. Tender points. Lagging, palpation percussion known as finger resistance is often a valuable method of differentiation. Tactile fremitus, friction and rales may be determined. Increased fremitus may be obtained in the early stages.

Percussion, light or heavy will determine the quality and pitch of the note and work out the apical outline. Dullness is of no special value in differentiation, but hyperresonance is one of the most constant and significant early signs of the incipient form. In the very early stages of phthisis percussion may be negative and misleading. Any abnormal inequality in the apices should receive further investigation, although the note on the left side is normally less intense, more resonant and lower in pitch than that of the right.

Auscultation is by far the important procedure of physical examination of the chest. Unilateral weak or rough breathing with diminished voice conduction is as important as an increase in their intensity. Each patient should be made to cough followed by deep inspiration when sibilant, cracking or bubbling rales or the mucous click may be heard.

The important areas are the apex anterior and posterior inner lung borders anteriorly, axillary apex, interlobular fissure outlined by the scapular border when the arm is on the opposite shoulder. Prolonged expiration and cogwheel or interrupted breathing are often of significance.

Although early diagnosis may be made months before bacilli appear in the sputum, nevertheless diligent search should be made for confirmatory evidence of suspicion. A swab of mucous may be taken directly from the larynx or a series of examinations may be made of the early morning sputum. Spenglers digestion method or the method of centrifugation may succeed when ordinary methods fail.

The Roentgen rays are often valuable, especially as a confirmatory aid to diagnosis. The interpretation of the findings is an art that must be appreciated. There are few experts and the methods of physical diagnosis are entirely sufficient for most cases.

The tuberculin tests may be of great value in confirming our observations. Four varieties are popular with the profession. The ophthalmo tuberculin reaction, known as the Calmette test, may be used in the weaker and stronger solutions in alternate eyes. The danger of a severe reaction is now well appreciated in cases of phlyctenular conjunctivitis, or any suspicious tubercular manifestation in the eye or eyelids. The Morrow reaction obtained on the skin beneath the sternum may be of occasional value. The Von Pirquet with controls is often useful among children. Hypodermic tuberculin may be of value when other diagnostic methods have failed, and should be used with extreme caution.

When the diagnosis is assured I believe it is our duty and obligation to inform the patient in a kind and sympathetic manner as to the true nature of the disease. When this sub-conscious bond of truthfulness and personal interest is established the fighting qualities of the patient are greatly increased.

BENCE-JONES PROTEINURIA.—Drs. T. R. Boggs and C. G. Guthrie Bull, *Johns Hopkins Hosp.*, December, 1912, describe a case associated with metastatic carcinoma. They present a table of 65 cases of myeloma and other extensive lesions of the bone marrow without the Bence-Jones reaction, and touch on various other interesting points.

ABSTRACTS

TUBERCULOUS TOXAEMIA AND TEMPERAMENT.—The editor of the *New York Medical Journal*, December 7, 1912, mentions the following geniuses who have succumbed to tuberculosis, strongly implying that their peculiar temperament, if not artistic ability, was due to the disease: Marie Bashkirtseff, her platonic affinity, Bastien Le Page, who painted the Joan of Arc, Chopin, Robert Louis Stevenson, Rachel, Stephen Crane, Schiller, Laurence Sterne, John Keats, Nevin, von Weber, John Sterling, Timrod, Artemas Ward, Henry Kirk White, Thoreau, Spinoza, Merimee, Symonds, Kingley, Southey, Shelley, Pollock, Pope, Hood, de Quincy, de Balzac, Hawthorne, Burns, Poe, Coppee, John Stuart Mill, Richelieu, Descartes, Cowper, Moliere, Botticelli's model, Simonetta Catanea, and the model who sat for the Blessed Damozel of Rosetti.

There certainly is an analogy in the literary conceptions, music and pictorial art of the respective geniuses and it is, perhaps, not far fetched, to find an analogy, though difficult to express, among the artistic peculiarities in these respective fields.

CARCINOMA SKIN REACTION.—Drs. Hans Lisser and Arthur Bloomfield (*Bulletin of John Hopkins Hospital*, December, 1912), tabulate 62 cases of verified cancer, 2/3 positive; 94 control cases, 91.6 per cent negative; indicating that conclusions should be drawn rather from positive than from negative reactions. Moss, following Landsteiner, showed that every human being had an apparently lifelong characteristic, with regard to positive or negative agglutination or haemolysis, there being obviously four groups. For the test, red corpuscles from normal individuals of group 4 must be used—neither agglutinated nor haemolysed by any sera in vitro. Fifteen c. c. of blood from the known normal person is withdrawn from a vein of the forearm the day before the test and mixed with sodium citrate solution to prevent clotting. The corpuscles are centrifugalized, washed three times with normal salt solution, made into a 20 per cent. suspension and left over night in the ice chest. One-third to one-half c. c. is injected (never later than 24 hours after preparation) subcutaneously in the patient's forearm. A positive reaction begins about 3 to 5 hours later and reaches its height in 6 to 8 hours. The injection should be made in the morning so as to allow inspection by daylight. A positive reaction consists in an irregular oval, raised spot, brownish red to maroon, with frequently a bluish or purple border. It is slightly boggy to touch

and often tender. On subsiding, an ordinary ecchymosis is left. A positive or negative test after a previous positive one and operation, has some prognostic value.

YELLOW TEETH DUE TO JAUNDICE.—Thursfield, Proceedings of the Royal Academy of Medicine, reports a case of congenital jaundice, with normal liver and spleen, but black stools, suggesting haematogenic jaundice. The jaundice remained deep for about 10 weeks and then slowly disappeared. At the age of nine months it was noticed that the two lower central incisors were yellow, afterward becoming green, varying in tint from bright to dull.

ELECTRIC RESEARCHES IN SIMIAN POLIOMYELITIS.—E. Bordet of Paris and V. Danulescu of Bucharest, *Arch. d'Elect. Med.*, October 25, 1912, refer to the initial studies of experimental poliomyelitis in monkeys by Landsteiner and Popper in 1909 and to the work of Levaditi, Flexner, etc. They detail various experiments, in the main showing an identical course in monkeys and in man, and conclude that the galvanic and faradic currents are harmless and of relative efficaciousness.

INTESTINAL CALCULI: CAUSES OF ERROR IN RENAL RADIOGRAPHY.—Rochet, Gayet and Arcelin of Lyon, *ibid.*, illustrate various puzzling cases. Renal calculi of uric acid and calcium oxalate may have either as a nucleus so that there may be a dark central mass with a light umbra, or vice versa. They may be found anywhere between the eleventh rib and the iliac crest, or even outside these limits and the mobility or fixity of the calculus is not diagnostic. Calculi of the appendix or colon may simulate renal calculus. Fruit pits, however, are much lighter than calculi, though the differentiation may become impossible as time elapses, from the deposition of lime salts.

INEFFECTUAL PROTECTION IN RADIOLOGY.—Th. Nogier of Lyon, *ibid.*, advises the use of both leaded rubber localizers around tubes, and of protective screens, garments, etc. As examples of the danger of a false sense of security, he showed a leaded rubber skull cap, quite pervious to X rays; a glass plate sold by one of the best manufacturers as lead glass which was ordinary glass; a pair of spectacles, one lens opaque to X rays, the other transparent.



PYELOGRAPHY (RADIOGRAPHY OF URETER AND RENAL PELVIS) IN DIAGNOSIS OF SURGICAL CONDITIONS OF KIDNEY.—George A. Matteson of Providence, in *Providence Med. Jour.*, November, 1912. Several interesting cases are reported. The name "pyelography" was suggested by Voelcker of Heidelberg, who did the

first work of the sort in 1906. Braasch of Rochester, Minn., is mentioned as having done the most extensive work in America. The technic consists in emptying the bowel, cystoscopy under local anaesthesia by alypin, ureteral catheterization, injection of 10-15 per cent. collargol, radiography. If an ounce can be in-



jected without causing pain, it is presumptive evidence of hydronephrosis. Three cases were similar to the one illustrated. In another, hydronephrosis was shown by the shadow, in addition to the denser shadow of a calculus previously noted but now demonstrated to be within the dilated renal pelvis. In another case, the diagnosis of movable kidney was verified and hydronephrosis was excluded. In another, colon bacillus infection was shown not to be accompanied by hydronephrosis, nephroptosis, etc. In two others negative results excluded the kidney as the cause of vague right sided pains.

GASTRIC ULCER IN CHILDREN.—Cackovic, *Archiv. fur klin. Chir.* reports 172 operative cases of gastric ulcer, 2.52% in children under 10, 7.55% in those under 15. All but two cases recovered.

SYPHILITIC REINFECTION WITH WASSERMANN REACTION STILL POSITIVE.—Gittings, *Brit. Med. Jour.* Two years after the first infection, during which time mercurial inunctions had been used, the patient developed a fresh lesion, containing living spirochetes, five weeks after the second exposure.

LONG USE OF TRACHEOTOMY TUBE.—Thomson, in the Proceedings of the Royal Society of Medicine, reported a woman who died at 81. Altogether, she had worn a tracheotomy tube, off and on, for 50 years. A single tube was worn for 16 years and often the tube was not changed for two years. No greater tendency to bronchitis was noted than in most old persons.

HERMAPHRODITISM WITH ADRENAL TUMORS.—Auvray, *Revue de Gyn. et de Chir. Abdom.*, reports a case of a woman aged 72, dead of intestinal obstruction. There was found a uterine myoma weighing 3½ pounds, pressing on the bowel at the pelvic brim. The ovaries were atrophic but showed traces of old corpora lutea. The clitoris was much enlarged. The left suprarenal contained an adeno-angeio-lipoma and was of the size of a cocoa-nut. Eight similar cases were found in the literature. Glynn and Apert hold that hyperplastic tumors of the adrenal, occurring before birth, leave the uterus above the cervix and the ovaries normal, but tend to the development of pseudo-hermaphroditism. Occurring in childhood, they tend to produce precocious menstruation and sexual maturity. Late in life they tend to produce an early menopause with obesity and hirsuties.

SYPHILITIC TRACHEAL STENOSIS.—Dr. E. H. Reede of Washington, D. C., *Wash. Med. Annals*, November, 1912, reports a fatal case in a woman aged 32 and weighing 200 pounds. A number of suffocative attacks occurred in the fourteen months ending in her death, July 12, 1912. A cicatrix was found at the bifurcation of the trachea, the lumen being only 2 m. m. in diam-



eter; three other cicatrices were found in the principal bronchi. The diagnosis of syphilis rested solely on these findings. A review of literature follows and the article is a most valuable monograph. Through the courtesy of the author and the editor, we are allowed to reproduce the accompanying illustration.

ABSENCE OF THE APPENDIX AND ILEO-CAECAL VALVE.—Ducos and Poey-Noguez, *Jour. de Med. de Bourdeaux*, September 20, 1912, describe a case found post-mortem and allude to literature. They have however found no other instance in which the latter was also absent.

TROUNECEK SERUM.—The *American Practitioner* recurs to this method for Arteriosclerosis. The formula is:

Sodium chlorid	10.	grammes
Sodium sulphate	1.	"
Calcium phosphate	.75	"
Magnesium phosphate	.75	"
Sodium carbonate	.40	"
Sodium phosphate	.30	"

1 gramme of the mixture is dissolved in 15 c. c. of sterile water. 2 c. c. is injected into the buttocks alternate days, increasing the dose by 1 c. c. till 8 c. c. are given. Obviously, the solution of the powder is best accomplished by making stock solutions and these will show a precipitate as is obvious from the composition. Personally, we cannot see the sense of using calcium in arteriosclerosis nor of introducing carbonates. We have, therefore, followed the formula of blood plasma, omitting carbonates which are adventitiously due to the presence of carbon dioxid, as well as lime, and distributing the acid radicles among the three other metallic bases. Chemically pure salts must be used, table salt containing appreciable quantities of lime which precipitate with sulphates. While theoretically advisable, we must confess never to have seen any conspicuous advantage from this method and have simplified it in most cases to prescribing chemically pure salt for use in the kitchen and on the table.

CANCROIN IDENTICAL WITH NEURIN.—Adamiewicz (quoted, *ibid.*) having apparently found injections of cancer extract beneficial in the treatment of cancer, and believing the active principle to be identical with neurin, advises the following formula:

- 25% solution of neurin 10 parts.
 - Saturated sol. citric acid 1.82 parts.
 - Saturated sol. phenol 1.25 parts.
 - Water to 30. parts.
- This is further diluted with water 50%, and 1 c. c. is injected.

BENDICI'S TEST FOR SUGAR.—Myers, *Munch. Med. Woch.*, endorses this test as more delicate to sugar and less to other reducing substances in urine, than Fehling's, Haine's and analogens copper solutions.

Sodium or Potassium citrate.....	173	grammes
Sodium carbonate, crystallized.....	200	"
(or anhydrous 100 grammes)		
Boiling water	800	"

Cool and filter, then add

Cupric sulphate 17.3 grammes

Water 100. "

Dilute to one Liter. Use exactly as Fehling's solution.

PERFORATION BY PROCTOSCOPE.—O. Retzloff, *Münch. Med. Woch.*, July 23, 1912, reports a case which recovered after suture.

INTESTINAL TUBERCULOSIS.—S. G. Gant of New York, states the frequency of different forms as follows (N. Y. State Jour., September, 1911: Per cent.

(a) Enteric or Superficial Ulcerative type.....	53.9
(b) Enterö-peritoneal or Deep Ulcerative type.....	26.9
(c) Hyperplastic or Tumor-forming type.....	9.6
(d) Fibro-sclerotic type (per cent. not given.)	
(e) Peritoneal type	7.7
(f) Glandular type	1.1

DIETETIC FADS AND PROTEINOPHORIA.—G. Frank Lydstrom of Chicago, *Dietetic and Hyg. Gaz.*, November, 1912, warns against carrying fear of meat too far. He claims that our ancestors were meat-eaters and that man was evolved as a carnivore. We agree with the general warning and with the statement that our ancestors were largely meat-eaters, but incline to the theory that primitive man was mainly nectivorous and graminivorous.

BILOCULAR STOMACH.—G. Jeanneney, *Jour. de Med. de Bordeaux*, September 20, 1912, refers to case of his own previously reported, occurring in a woman of 74 and due to a corset. He now presents a specimen from Dupoux's practice, occurring in a woman aged 54, who died of cerebral haemorrhage. He does not specify the cause of the present case but sums up the general etiology as follows: Corset pressure, frequent in acquired cases; Sappey's theory of energetic muscular contraction of the stomach, untenable; reversion to ancestral type, in congenital cases, among which the present may belong. Testut stated that rodents generally had bilocular stomachs. The author concedes this for the rabbit, although the division is not conspicuous externally. In dissections of the young rat, he had not found this condition. In ruminants, the stomach of the foetus is bilocular, the quadrilocular type being developed later.

POST-DIPHTHERITIC Paralysis of Pseudo-tabetic type, treated by antidiphtheritic serum, cure. B. Auché, *ibid.*, October 13, 1912. The patient, aged 34, contracted diphtheria from his own

child, who died. He received the usual treatment, including three injections of serum. The paralysis was noted at about the beginning of convalescence, between three and four weeks from the onset of the disease. A month later, he was admitted to the service of the authors and treated as noted, receiving in all, 140 c. c. of serum in a month. He was allowed to leave the hospital a trifle prematurely, but practically well, four months from the initial attack of diphtheria.

CALCIFIED AORTIC ANEURYSM.—Secousse, *Jour. de Med. de Bordeaux*, September 8, 1912. The patient died of acute bronchopneumonia, the aneurysm being discovered post portem. It was 8 c. m. broad, 10 high, with walls about $\frac{1}{2}$ c. m. thick. At each side was a diverticulum, of the size of a large nut, obstructed by a calculus.

MULTIPLE ANOMALIES.—G. Jeanneney, *ibid.*, describes the dissection of a female cadaver, aged 74. The anomalies were: Fasciculus of trapezius inserting into sternum; division of axillary artery into radial and cubito-interosseous branches; dilatation of oesophagus; a long S-shaped hepatic tongue extending as low as the anterior superior iliac spine; azygos lobe of the right lung.

PRESERVATION OF VACCINE BY COLD BELOW FREEZING POINT.—LeFavre, *ibid.*, September 15, 1912, states that vaccine thus preserved was active after three years, but advises that it be used within two years.

INTRA-PERITONEAL INJECTIONS OF CHLOROFORM TO PRODUCE GENERAL ANAESTHESIA.—G. Jeanneney, *ibid.*, September 20, 1912, describes various experiments, animal and human, showing that anaesthesia can be produced with approximately $\frac{1}{2}$ c. c. per kilo of body weight, 10% and later 50% mixtures of chloroform and glycerin and of 50% in sterilized olive oil were used. However, considering the danger of perforating viscera (a cat suffered perforation of the bladder and the liver showed intoxication), degenerative changes, etc., the author concludes that the method is not practical, either surgically or physiologically. (Note—Investigators often fail to realize that a carefully conducted series of experiments with a negative result are usually just as valuable as one leading to positive recommendations. A prize award was refused, a few years ago, because the author, after much expenditure of time and money, was honest enough to disclaim brilliant results and presented his conclusions with numerous qualifications.)

SYPHILITIC MEDIASTINITIS.—Camille Lian and L. Baron of Paris, *Progres Medical*, November 16, 1912. The principal symptoms in a man of 30 were attacks of suffocation, spasms of the glottis, roaring in the ears, transient deafness, pulse sometimes 130, sometimes 40, at times arrhythmic; oedematous pharyngitis, enlarged cervical, axillary and inguinal nodes, liver two fingers' breadths below costal arch in mammillary line, left lobe filling epigastric region to one finger's breadth above umbilicus, spleen perhaps slightly enlarged but not palpable, no ascites, inferior tegumentary epigastric vein of Braune, enlarged on each side so as to be plainly visible from inguinal regions to neck. The diagnosis was corroborated by an oblique radiographic examination, showing an irregular obscuration of the normally clear space between the cardio-aortic and vertebral shadows.

In a general discussion, various signs are mentioned: Broadbent's sign of pleuro-costal systolic retraction, in the precordium and below and outside of the scapular angle; Kussmaul's paradoxical pulse; Wenckebach's sign, lower part of sternum not carried forward in inspiration as normally, on account of fibrous bands; Radoniicic's sign, that in the recumbent posture, the arterial pressure differs in the two sides, on account of pressure of the diaphragm, the difference disappearing when the patient sits up. On the whole, radiography is considered the most constant diagnostic method.

A female patient, aged 49, is mentioned as having also aneurysm of the aortic arch, with obliteration of the left brachiocephalic vein. Syphilitic tracheo-bronchitis and, especially in children, tuberculosis, with adenopathies, are mentioned as frequent complications.

THE GIANT MAGNET IN THE EXTRACTION OF FOREIGN BODIES FROM THE EYE.—Willis O. Nance, Chicago (*Journal Oph. and Oto.-Laryng.*, October, 1912), emphasizes the point that cases of injury in which the coats of the eye are ruptured demand the care of the skilled specialist. In perforation of the cornea the flying missile very rarely lodges in the anterior chamber but almost invariably enters deeper into the eye before coming to rest. It is in these cases that the giant magnet is of the greatest value. The importance of proper technic in the removal of foreign bodies from the vitreous is second only to the operation for cataract in surgical ophthalmology. Unskilled maneuvers may easily make a bad matter worse. The shape and size of the foreign body is of great importance. If the location is shown by the X ray to be in a convenient position it may be better to re-

move it by a new opening through the sclera. A few cases have been reported where foreign bodies have been removed after negative X-ray report. Early removal is essential. A large proportion of cases of sympathetic inflammation occur in eyes in which a foreign body exists in the other eye. The giant magnet is an instrument of untold value. Without it many eyes would go to destruction and many more cases of sympathetic uveitis would occur.

Note.—In each of the eye dispensaries in Buffalo there is a giant magnet, supplied by Erie county, and, for physicians, accessible at all times without any charge.

WIDENING OF THE FIELD OF ABDOMINAL SURGERY FROM LIFE-SAVING TO HEALTH-RESTORING OPERATIONS.—Arthur E. Giles, London, *Dominion Med. Mo.*, December, 1912. We quote only the statistics of abdominal operations at the Chelsea Hospital for Women:

Years.	No. of Abdominal Operations.	No. of Deaths.	Percentage Mortality.
1886—1890	126	27	21.4
1891—1895	206	35	17.0
1896—1900	879	50	5.6
1901—1905	1,493	63	4.2
1906—1910	1,880	54	2.8

OPERATIONS FOR TUBAL DISEASE.

Years.	No. of Operations.	No. of Deaths.	Percentage Mortality.
1886—1890	12	4	33.3
1891—1895	22	3	13.6
1896—1900	198	7	3.5
1901—1905	302	10	3.3
1906—1910	363	5	1.3

HYSTERECTOMY FOR FIBROIDS OF THE UTERUS.

Years.	No. of Operations.	No. of Deaths.	Percentage Mortality.
1886—1890	14	5	35.7
1891—1895	12	5	41.6
1896—1900	150	16	10.6
1901—1905	345	18	5.2
1906—1910	487	9	1.8

A PRACTICAL SOURCE OF INULIN.—Editorial in *Western Med. Rev.*, November, 1912. Referring to Strauss's articles in the *Deutsche Med. Woch.*, March 7, and *Berliner Klin. Woch.*, June 24, 1912, the editor makes some very caustic criticisms as to indefinite descriptions of plants and plant parts by Strauss (which may, however, have been perfectly clear to a German audience) and emphasizes the practical fact that inuloid, isomeric with inulin, is abundant in the tubers of the ordinary Jerusalem artichoke, which are so cheap as to be used for cattle food. Inulin from elecampane is expensive. He thinks that viper's grass (black salsify or scorsonera hispanica), the German plant recommended by Strauss, furnishes larger and more tasty roots than the ordinary salsify (vegetable oyster) and that it should be cultivated in the United States.

THE SIGNIFICANCE OF ARTERIOSCLEROSIS IN THE FUNDUS OCULI.—Emory Hill of Chicago (*Ill. Med. Journal*, November, 1912), describes the appearance of beginning sclerosis in the retinal vessels. The early evidence of a degeneration of the arterial system, with its prophecy of a general physical and mental decay, is essential to preventive therapeutics. Modern life involves for many of the population unceasing demand on the human organism for more labor, whether it be called work or play, than it can safely perform. It is the ophthalmologist's fortune to be able to study the circulation in the retina as it can be studied nowhere else in the entire organism. The appearance of sclerotic changes here may be pathognomonic when the stethoscope, the palpating finger and the sphygmomanometer do not elicit the classic symptoms of the disease. Much has been written recently on the subject, and post mortem findings have given positive information, especially in respect to the associated vascular disease of the retina and brain, of whose nervous tissue the retina is to be regarded as an expansion. Geis, from Uhthoff's clinic in Breslau, learned that with arteriosclerosis of the retinal vessels microscopically proved there is always a similar condition of the basilar brain vessels and often localized softening of the brain tissue as well. Of 17 cases of advanced retinal arteriosclerosis all died of apoplexy, generally within four years. The vagueness of the symptoms in these cases makes them hard to treat. But their importance makes it imperative that they be not neglected. The average patient trusts more to the powers of a bitter concoction than to the pursuit of a rational hygienic plan. The problem of the overworked and overworried middle-aged man or woman is a large one; and the satisfaction is also large when we can put them in the way of health and efficiency

and prolong their working years, through the combined advice of ophthalmologist and family physician, with the modicum of drugs which may serve as adjuvants to wholesome living.

TRIFACIAL REFLEXES WITH SPECIAL REFERENCE TO DISEASES OF THE EYE, EAR AND NOSE.—Albert H. Andrews of Chicago (*Journal Oph. and Oto.-Laryng.*, September, 1912), discusses three phases of the subject: the anatomic, the physiologic and the clinical.

Assuming that an irritation of the terminal filaments of a sensory nerve may produce a disturbance of sensation referred to the terminal filaments of another branch of the same nerve, it is easy to see how disturbance of vision through the ciliary nerves, lenticular ganglion, and the cavernous branch may produce frontal headaches; or through the Gasserian ganglion to the branch of the tentorium cerebelli may produce occipital headaches. It is also easy to see how in disease or malformation of the turbinate bodies making pressure on the septum, the pain may be referred to the eyes. When we remember that the iris and ciliary body are supplied by branches of this nerve, we can understand why pain in the eye of nasal origin may be increased by using the eye for close work, even when there is no refractive error. Non-suppurative diseases produce reflex disturbances, while suppurative diseases do not because in the latter the suppurative processes destroy the sensory nerve terminals.

He enumerates a dozen cases, each one illustrating a different reflex disturbance through the distribution of the trifacial—pain in the ear and headache from antrum disease—antrum disease affecting the teeth; pain in the ear from dental disease; turbinate trouble causing eye distress; disease of the turbinates causing headache and vomiting; ethmoiditis causing eye trouble and neurasthenia; cough produced by atrophic rhinitis, also by atrophic tonsil, etc.

REGARDING TRANSPLANTATION OF HAIRY SKIN.—Carl Lauenstein, Hamburg (*Zent. fur Chir.*, September 7, 1912). A man who had tried every known method of specialism, as well as quackery, to obtain a growth of hair on his bald head, prevailed on Dr. Lauenstein to attempt the transplantation of a part of the well-covered scalp of another, whose consent was presumably bought, to the head of the first. In March, 1912, the exchange was made, using the whole skin. The transplant of hairy scalp, in area 10 cm. by 5 cm., broke down by septic necrosis on the head of the bald individual, whereas, the bald transplant was fairly successful on the head of the other.

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"Beauty is only skin deep" originated with a man who had never seen a Haversian system, a section of the retina or a blood mount.

The Significance of the Collegiate Year, as a Requirement to Medical Matriculation

At first thought, it would appear that the requirement of one more year of preliminary education for medical students is of minor importance, and that barring the slight mortality at the corresponding age and the chances of diversion of interests by accidental causes, as many students would enter medical colleges as formerly. We are inclined to prophesy, however, a very radical change from this further entrance of the wedge.

First of all, universities in the sense of educational institutions combining collegiate and professional courses, will be given an enormous advantage from the tendency of students generally to preserve an established affiliation or, at least, to pass from one to another institution of essentially the same grade and customs. This tendency involves an injustice to many worthy independent colleges and medical schools, but it cannot be denied that, on the whole, it is in line with the general tendency to the survival of the fittest. The better class of independent schools will probably affiliate in such a way as to secure both material strength and facilities for improved instruction. Since many universities exist with departments in two towns, it is obvious that combinations of independent schools need not involve the removal of either.

Moreover, while it is not true that every independent college and professional school is either weak or ethically objectionable, it is true in the aggregate that the best class of schools of all kinds are parts of universities and that the undesirable institutions are mainly independent organizations. Thus, solely from the standpoint of thoroughness, the additional requirement for matriculation has a much more radical tendency than appears at first sight, since it will almost inevitably place an increasing number of students under a stricter supervision.

It needs no argument to show that a requirement which is not only quantitatively greater but qualitatively more stringent will have a marked influence in diminishing the number of matriculants. But the mere fact of passing from the full high school standard to the beginning of the college standard will probably have a far greater influence in this direction. Without in any sense exaggerating the importance of college training—and we personally incline to the view that it has been much exaggerated in the past—it must be admitted that the horizon of the college freshman, so far as scholastic and professional matters are concerned, is much broader than that of the high school senior. Once settled in college, almost every influence is at work to retain the student there up to the completion of the course, except a regard for financial expense and the expense in time invested. Fraternities dislike to accept a member who will leave at the end of a year. Many of the more desirable athletic and other college organizations have the same rule, or do not even admit to membership till after the first year. The influence of faculty, fellow students and often the student's family and the intrinsic charm of college life, as well as awakened ambition, are all strongly for a full course or, at least, for the standard combination college and professional course of six or seven years.

Again, there is the feeling that with only one year to be saved from the approved combination course of the better grade universities, it does not pay to stop short with the minimum requirement, and there is also a strong temptation on the part of one taking the six-year combination course to add another year and secure both the professional and the baccalaureat degree. Thus, we are inclined to think that the legal requirement of one year in college will induce fully half of all prospective medical students to take at least two years. It is obvious, therefore that, if the premises are correct, the increased requirement will have a much greater economic, restrictive effect on medical matriculation, than appears on the surface.

But this is not all. The ambitions, judgment and selective affinities of a youth who has decided to study medicine and who has, for that purpose, rather reluctantly or at least perfunctorily,

finished a high school course or "made up points," are very different from those of the same youth, a year or two older and well started on a college course. He is now one of the (scholastically) upper $2\frac{1}{2}$ per cent. instead of the upper 10 or 12 per cent. Except for his tentative choice of a profession, his future is not limited to this any more than is that of his classmates. Several professions and various lucrative business careers are equally within his grasp and, in the natural course of events, many boys who have gone to college expressly to conform to the medical matriculation law, will consider themselves better adapted to other callings.

We are inclined, therefore, to regard the increase in matriculation standards, comparatively insignificant as it first appears, as of the utmost significance, first in helping to solve certain ethical problems regarding medical education and, secondly, by limiting to a considerable degree the supply of physicians and hence tending to restore the equilibrium between supply and demand. And this second influence is perhaps more important because a sound economic basis is the greatest prophylactic of ethical failures in any profession or business.

Loss of Subscriptions

We have lost a regrettably large number of subscribers by death and a few by retirement and removal to parts unknown. Excepting these inevitable losses and the preliminary erasure of a number of nominal subscriptions in arrears for many years, we have lost only 22 subscribers in nearly a year and a half and have added several hundred to the list. What is particularly gratifying, is the steady receipt of orders from distant parts, even outside of the United States, not the result of any campaign nor directly traceable to opportunities of seeing copies in the hands of others. We feel, however, that the BUFFALO MEDICAL JOURNAL has a special field for usefulness in Western New York, as indicated approximately by the Associate Staff, and we request missionary work by present subscribers. This request is justified by the fact that the editorship can scarcely be classified as a "gainful occupation," although the JOURNAL itself is on a firm financial footing; and by the fact that every subscriber is a source of strength, not so much because of the subscription fee, as by his influence and interest.

Christian Science

A while ago we attended a Christian Science lecture, not because we are tending in that direction nor "investigating" the subject, but because it is a good plan for everyone to hear the

other side rather than a reiteration of his views, whether they be political, religious or philosophic. In one sense, the strength of any cult lies in its audience. It must be admitted that Christian Science is phenomenally strong in this respect. This audience was large, decorous, thoughtful, if not keenly and analytically critical. One little thing impressed us forcibly, we met several friends and were introduced to several others deeply interested in the cause. There was not a sign of the vulgar gloating over the presence of one of a different faith that is to be seen at many meetings, political, religious and medical, and no hair-trigger proselyting such as mars the dignity of some churches. In other words, these people were too well bred hosts to express surprise at the presence of a guest. However, we may disagree with Christian Scientists, they are almost without exception gentlemen and ladies, and we like them in social life because they are not eternally fussing about their insides and tempting us to talk shop about their viscera, as do so many of our lay adherents.

The speaker, Prof. Hermann S. Hering, C. S. B., of the Board of Lectureship of the "Mother Church" in Boston, stated the prime moving cause of Christian Science to be a desire to heal disease and sin, and a dissatisfaction with the established medical and theologic efforts in these respective directions. Without attempting to speak for the theologians, we feel that we represent every conscientious physician in saying that no organization is more keenly and actively dissatisfied with the practical results of medicine than the medical profession itself. That we have gained signal victories in many instances, only makes us more anxious to achieve the same success in others. The fact that apparently fixed barriers have been passed by our therapeutic measures, always based on clearer understanding or material demonstrations—has done away with the old complacency that this or that condition was humanly speaking irremediable. And very few of us would be restrained by prejudice from adopting any method shown to be of value. Indeed, except in conception and what appears to us an unwarranted generalization, essentially the methods of Christian Science have long been in use by the medical profession and are prominent in its therapeutics to-day.

At the outset of the lecture, it occurred to us that the lecturer's own words were inconsistent with his expressed views. But it soon became apparent that this inconsistency was precisely the converse of what would be noticed in a lecture by a materialist and due to the fact that language has been built up by man recognizing both matter and spiritual force.

It was stated that physical scientists themselves have relegated matter to a basis of force or energy by demonstrating that the atom is composed of electrons, each of which is a unit of positive or negative electric energy. The whole logic of the speaker is well illustrated by this sophistry. Neither the electron nor the atom is an established fact but merely a plausible and probable theory. And no physical scientist of whom we know, has confused the energy manifested in the putative electron, with its material substance. Instead of the ionic theory abandoning the conception of matter for energy, it has rather tended to restore the older conception of electricity as a stream of actual particles.

Whatever may be said of "spirit"—and our disinclination to discuss this point implies no disbelief in the conception—practically all forms of science, in all times, have clearly recognized both matter and force as distinct concepts, fundamentally axiomatic. There is no demonstration of an axiom. To use the words of the lecturer, $2 \times 2 = 4$ always and everywhere, and the man who declares the product to be 5 is radically wrong. But we do not know how to convince him of his error, nor, indeed, how to convince the Christian Scientist that he is the one who is putting down 5 as the product. But we have known of otitis media, gastric ulcer and chronic typhlitis convincing individual Christian Scientists that they had been doing so. Indeed, our own copy of Science and Health was presented as a material token of such conviction.

Ethics and Professional Influence

An editorial is supposed to present the ultimate wisdom on a point of scientific fact or professional policy. Unfortunately, there are editors, who realize the importance of certain moot points but do not possess the wisdom to pronounce a final verdict. Sometimes the editor realizes this lack, sometimes he does not. The present is one of the cases in which it seems best to present an unsolved problem.

We have always been in hearty accord with and have endeavored to practice and uphold the principles and rules of medical ethics. Even medical etiquette has seemed more important in many instances than the name implies. The only exceptions have been in a few instances in which a codified rule exaggerates the importance of an arbitrary opinion or a minor principle of ethics should be subordinated to a principle so fundamental that it will ordinarily be considered one of common honesty and morals, rather than ethics.

In intercourse with members of other professions, and especially with business men, we have been impressed with the very

general opinion that the medical profession is warped in its views, fussy about certain ideals, narrow in its outlook, and, if not too selfish, at least too hide-bound, to be trusted to regulate the various problems of professional polity and to control others, as it seeks to do by its influence on popular and legislative opinion.

This is most unfortunate, for the medical profession is charitable, if anything it is too indifferent to its own material welfare, rarely or never does even a small body of medical men attempt to exert an influence to secure any law which it does not consider disinterestedly, and the profession, more than any other, has consistently sacrificed its own interests to those of the community.

Do we need to climb to a higher viewpoint to secure a broader conception of ethical problems? If so, how shall we attain it? If not, how shall we dispel the unfavorable opinion of our critics?

TOPICS OF PUBLIC INTEREST.

TELEGRAPHIC REPORTS OF COMMUNICABLE DISEASES TO THE PUBLIC HEALTH SERVICE.—At the Tenth Annual Conference of State and Territorial Health Authorities with the United States Public Health Service, held in Washington, June 1, 1912, a resolution was submitted by the conference committee on Morbidity Reports and adopted by the conference, providing for the telegraphic report (collect) to the Surgeon General of the Public Health Service of the occurrence of cases of certain diseases of special importance; also telegraphic reports of outbreaks and epidemics of certain diseases, the telegrams in each instance to be followed by a report by mail. Provision is also made for monthly reports of notifiable diseases and for special reports of outbreaks of small pox in which fatal cases occur.

Blanks have been prepared for:

(1) The reports to be mailed subsequent to the telegraphic report of the occurrence of cholera, typhus fever, yellow fever, plague and Rocky Mountain spotted (or tick) fever.

(2) The regular monthly reports.

(3) Reports of outbreaks of smallpox with fatal cases.

COMMISSION TO INVESTIGATE VIVISECTION.—January 14, 1913. State of New York. No. 153. In Senate. Introduced by Senator McClelland, read once and referred to the Judiciary Committee. An Act to Create a Commission to Investigate the Present Condition and Extent of the Practice of Experimentation on Living Animals in This State and to Report what Changes.

if Any, in the Existing Laws, are Desirable to Protect Animals from Unnecessary Suffering in this Practice without Unreasonably Interfering with Legitimate Scientific Research.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1.—The Governor is hereby empowered to appoint a commission which shall consist of five (5) members, two (2) of whom shall be physicians or persons experienced in the practice of vivisection and residing within this State, two (2) of whom shall be active members of some organization within this State having for its purposes the prevention of cruelty in Animal Experimentation, and the remaining member of which commission shall be appointed by the Governor at large.

Sec. 2.—Such commission shall investigate and report the present condition and extent of the practice of experimentation on living animals in this State and the amount of avoidable cruelty involved therein; also make a full inquiry into the present condition of the law of this State for the protection or regulation of scientific investigation or research of this character; also consider the condition and effectiveness of the law for the prevention of abuse in animal experimentation or of unnecessary cruelty to animals therein. It shall inquire what further legislation, if any, may be needed to prevent unnecessary suffering of animals through such practice or its abuse, without interfering with properly conducted and legitimate scientific experiments by competent experts. For these purposes the said commission is hereby authorized to investigate the practice as it exists, to send for persons or papers to administer oaths and to examine witnesses and papers respecting all matters pertaining to this subject. This commission shall serve without compensation and shall make a full and final report to the Governor within one (1) year after its appointment, including such recommendations for legislation as in its judgment may seem proper.

Sec. 3.—This act shall take effect immediately.

Published by the Society for the Prevention of Abuse in Animal Experimentation, 204 Montague street, Brooklyn, N. Y. This society expressly disavows sympathy with anti-vivisectionists and the medical profession is largely represented on its advisory board. The officers are: President, J. B. Y. Warner, Rochester, N. Y.; Vice-President, Jefferson Seligman, New York; Treasurer and Counselor, Frederick P. Bellamy; Secretary, Mrs. William Vanamee, 204 Montague St., Brooklyn.

This bill should receive careful and impartial consideration by the medical profession, unless it can be shown—as does not seem likely—that there is some sinister motive behind the bill, it

should receive professional support. Otherwise it is not improbable that the medical profession will be accused of concealing abuses and popular opinion will support the demand of anti-vivisectionists for a drastic law that will seriously impede scientific and humanitarian advancement.

MORTALITY IN HUNTING.—Twenty-seven hunters and 15,000 deer were killed in New England during the season just ended.

A COMPULSORY VACCINATION BILL has recently been killed in the Vermont legislature.

DENTAL INSPECTOR FOR NIAGARA FALLS.—The Board of Education has asked for an appropriation of \$1,000 for this object.

INFANTILE PARALYSIS.—A case was reported in Niagara Falls, December 31, the first in several months.

FOUR CHILDREN IN ONE YEAR.—On January 13, 1912, Mrs. John A. Klemm of Des Moines gave birth to twin girls, still alive and well; and on January 3, 1913, to twin boys, each weighing seven pounds and vigorous.

MERRY CHRISTMAS.—A St. Louis doctor's wife presented him with a razor strop made from the skin of a leg which he amputated and which she preserved and had tanned. If Santa Claus has brought any of our readers a gall stone watch charm or any similar cheerful reminder of professional prowess and wifely devotion, we shall be pleased to record the fact.

ACTING DENTAL SURGEONS.—Examinations will be held at Fort Slocum, N. Y., Columbus Barracks, Ohio, and elsewhere, April 7. Appointments are for three years at \$150 per month, with promotion on further examination at the end of the period, to the grade of dental surgeon with relative rank of first lieutenant. Application should be made to the Surgeon General, U. S. Army, Washington, D. C. There is a large number of vacancies.

CHIEF OF DEPARTMENT OF MEDICINE, PHILIPPINE GENERAL HOSPITAL.—This position will be filled on evidence of fitness as indicated by application and examination submitted in writing. The salary is \$4,000. Applicants must be under 40. Apply for Form B. 1, A. 2, to U. S. Civil Service Commission, Washington, D. C.

THE IOLA SANITARIUM (Monroe County Tuberculosis Hospital), makes an interesting showing in its annual report. Beginning with 10 patients in October, 1910, it has gradually increased to an average daily attendance of 91, about evenly divided among incipient, moderately advanced and advanced cases, of all ages. Of 242 discharges, 62 were by permission, 7 were references to Raybrook, Saranac and return to old country, 3 were expelled, 41 left against advice, 52 absconded and 84 died. Obviously with no power to retain cases against their will, and with the admission of all grades of the disease, a high proportion of cures is not to be expected, and very conservative and non-committal claims are made in this regard:

	Apparently			
	Recovered.	Arrested.	Improved.	Unimproved.
62 Incipient.....	10	12	14	25
48 Mod. Advanced.	1	6	19	22
48 Advanced.....	0	1	24	23

pupils, a total of 105 especially dangerous to others; 30

Of 272 persons 31 were engaged in handling foods, making clothing, etc.; 37 in house work and 37 were school laborers and 10 teamsters were included, a noteworthy fact in reference to etiology, as the occupations imply out-door work. On the other hand, indoor labor did not exceed 5 to an occupation (shoemakers) and was usually 1 or 2 to an occupation. Here is food for thought.

MORAL IMBECILITY.—One of a gang of burglars recently caught in Buffalo was deliberately trephined, a few years ago, in the hope of improving his mentality and moral appreciation. While the operation evidently did not produce absolute success, it introduces a peculiar medico-legal element into the prosecution, and we venture to predict that the man cannot be imprisoned except in a suitable institution as a defective.

PHYSICIAN GIVES SITE FOR CAMPUS.—Dr. John P. Munn, New York City, president of the United States Life Insurance Company, has offered the University of Rochester a lot 370 by 170 feet at the corner of Prince street and University avenue as a site for the Women's Campus.

THE NAVY LEAGUE OF THE UNITED STATES seeks legislation to reorganize the personnel of the navy, to favor early promotion, and to obviate too early retirement of fleet commanders; also to determine a consistent policy of naval construction by the establishment of a Council of National Defense. We are asked to

support a petition to Congress along these lines. It seems unwise to give this support because a medical editor is presumably, and in the present instance, actually, lacking in expert knowledge on such a question. We may say, however, that on general principles, rapid promotion early in a career, and retention of active service for a long term after securing a high position, seems to imply a large organization, and one rapidly increasing, whether we deal with the navy, the army, or anything else. Without in any way favoring a niggardly or short-sighted policy, the present problems of this country are largely economic and demand retrenchment to the fullest degree compatible with safety.

MEASLES assumed the degree of an epidemic in North Tonawanda on New Year's Day. The school at La Salle and several in Niagara Falls have been closed.

ELECTION BOOTH USED TO HOUSE CONSUMPTIVE IN NIAGARA FALLS.—Owing to the failure to provide a county institution, a legless man will be thus cared for. While it would seem that, with proper precautions, tuberculous patients might be kept in general hospitals indefinitely, in the absence of special institutions, the State law is explicit in this respect. Old street cars have been suggested as almost ideal bungalows for consumptives—though it seems that they might prove drafty and afford niduses of infection—and an election booth might also be modified so as to make a fairly good hospital for one or two patients, in an emergency.

THE SALARY OF THE STEUBEN COUNTY BACTERIOLOGIST has been fixed at \$1,500 by the supervisors, \$500 to be appropriated from the treasury if the fees are not adequate.

MARRIED NURSES.—So much has been said in criticism of the marriage of nurses that the statistics of the Children's Hospital of Buffalo (Twentieth Annual Report, October, 1912), may be of interest. Out of a total of 78 graduate nurses from 1903 to 1912, 1 has died and 12 are married. Considering that nurses are of the usual marriagable age and selected and trained so as to represent a class superior to the average, this does not seem to show an excessive rate.

WASTE OF SEWAGE.—Professor King of the University of Wisconsin estimates the annual waste, per 1,000,000 population at 5 to 12 million pounds of organic nitrogen; 2 to 4 million pounds of potassium; 1 to 3 million pounds of phosphorus. A comparison is made with the thrift of the Chinese who have supported their dense population with no loss of fertility of the soil.

DISTRIBUTION OF WEALTH.—Charles B. Spahr in 1895 published the following statistics. We cannot vouch for their accuracy and would be glad of information on the subject:

Class.	No. of Families.	Percent. of pop.	Ave. wealth per family	Aggregate wealth.	Percent. total wealth
Rich	125,000	1.0	263,040	32,880,000,000	54.6
Middle	1,362,500	10.9	14,180	19,320,000,000	32.2
Poor	4,762,500	38.1	1,639	7,800,000,000	13.0
Very poor..	6,200 000	50.0			
Total	12,500,000	100.00	4,800	60,000,000,000	100.0

THE NEW YORK STATE BOARD OF REGENTS has barred the graduates of 22 medical colleges of the United States and Canada from practicing in the State, unless they shall comply with the State Board's requirements. The institutions are as follows: Oakland College of Medicine and Surgery, Oakland, Cal.; Medical Department, Howard University, Washington, D. C.; Chicago College of Medicine and Surgery, Chicago, Ill.; Valparaiso University Medical Department, Valparaiso, Ind.; Hahnemann Medical College of Chicago; College of Physicians and Surgeons, Chicago; College of Homeopathic Medicine, State University of Iowa; College of Medicine, State University of Iowa; Kansas Medical College, Department of Washburn College, Topeka, Kan.; College of Physicians and Surgeons, Baltimore; School of Medicine, Boston University; Medical Department, Creighton University, Omaha; Dartmouth Medical School, Hanover, N. H.; Cleveland-Pulte Medical College, Cleveland, O.; College of Medicine, University of Tennessee, Memphis, Tenn.; Medical Department, Vanderbilt University, Nashville, Tenn.; Milwaukee Medical College, Department of Marquette University, Milwaukee, Wis.; Wisconsin College of Physicians and Surgeons, Carroll College, Milwaukee, Wis.; Manitoba Medical College, Winnipeg; Faculty of Medicine, Dalhousie University, Halifax, N. S.; Faculty of Medicine, University of Toronto, Canada; Faculty of Medicine, McGill University, Montreal, Quebec.

REPORT OF BUREAU OF DEPORTATION, STATE OF NEW YORK.

	1912.	1911.	Per Ct. of Inc.
Number new cases under observation.....	2,704	1,934	39.8
Deported by U. S. Immigration Service....	419	345	21.4
Repatriated at expense of state.....	474	204	132.8
Repatriated at expense of friends.....	278	235	18.3
Total	1,171	784	

Non-residents returned to other states:

Expense of state.....	295	151	95.3
Expense of friends.....	287	191	50.4
Total	582	342	

Total aliens deported and non-residents re-
turned

1,753 1,126 55.7

PROPORTION OF IMMIGRATION DESTINED TO NEW YORK, 1905-12.

Year.	Total immigration.	No. destined to N. Y. State.	Per cent. destined to N. Y. State.
1905.....	1,026,499	315,511	31.0
1906.....	1,100,735	374,708	34.0
1907.....	1,285,349	386,244	30.0
1908.....	782,270	256,425	32.7
1909.....	751,786	220,865	29.4
1910.....	1,041,570	280,880	26.9
1911.....	878,587	258,113	29.4
1912.....	838,172	239,275	28.5
Total.....	7,704,968	2,332,021	
Annual average.....	963,121	291,503	30.3

RATING OF MEDICAL SCHOOLS.—The Council of Medical Education (Jour. A. M. A., January 18, 1913), has made an interesting report. We give only the statistics:

Class A Plus. 4-year schools, 22 (including P. & S., Cornell, University and Bellevue and Syracuse for N. Y.) 2-year schools, 2.

Class A (acceptable but lacking in certain details): 4-year schools, 31 (including N. Y. Homoeop., Albany and Buffalo, for N. Y.) (2 to be merged). 2-year schools, 6.

Class B (needing general improvements): 4-year schools, 22 (one will be converted into a post-graduate school in three years, one will be discontinued and one gives only last two clinical years); 2-year schools, 1.

Class C (requiring complete reorganization): 4-year schools, 27 (6 not recognized as in good standing by their state boards, 2 about to be reorganized).

Class A for colored students, 2.

Class C for colored students, 2.

Total schools conferring degrees, 106, three to be discontinued.

Net total schools conferring degrees, 103.

While we have long advocated improvement in medical education and, for economic reasons, restriction of the number of schools, there are some considerations that should tend to a charitable attitude. For example, there are quite a number of physicians of ten to forty or more years standing who have done quite creditable work. Yet not more than a very few obtained their diplomas on courses that would now be graded even in Class C.

We are conducting a practice and a journal as well as possible under existing circumstances, but we should be very much surprised to have either marked A plus—and for the same reason that some very excellent medical schools are graded only A or B, lack of money. It is the present fashion to cast stones at medical institutions. Let us all forego this agreeable exercise until we are sure we are not, ourselves, living in green houses. It is perfectly possible that a school may fulfill a real need and be honestly and conscientiously conducted and yet not be successful in obtaining a large supply of tainted money.

It is not unreasonable to interpret the sixth commandment as applying to human activities as well as human existence.

On the other hand, the merging of weak schools into strong ones is to be commended. The Birmingham Medical College, rated as B, has carried out an idea that we have had for some time: After graduating the three classes already in attendance, it will be converted into a post-graduate school. There are a number of institutions, fairly well equipped but not actually needed to augment the already excessive numbers of the profession, and not financially able to comply with the ever increasing standards of undergraduate education. As centers of professional club life, libraries, museums and laboratories for investigation, these schools would fulfill a higher mission and there would be no objection to conceding to their present faculties all the prestige and opportunities for emolument that they enjoy at present.

FIFTH YEAR OF MEDICAL STUDY will be required in Pennsylvania after 1914. The additional year will, however, amount practically to compulsory interne service, of which 90 per cent. of graduates already avail themselves.

DEATHS AND INJURIES DUE TO SURFACE, ELEVATED AND SUBURBAN TRACTION CARS. In New York in 1912, 290 persons were killed; 30,000 passengers and 7000 employes were injured. 1378 injuries were serious.

N. A. R. D. PRESCRIPTION PRICING SCHEDULE (all fees are compounding fees only.)

1.—*Liquid Prescriptions*—Minimum charge, 25c. All sample or compound mixtures, internal or external, dry or liquid, eye or private disease remedies, and veterinary preparations are included in this table.

Quantity.	Dose. 1-5 M.	Dose. 10-25 M.	Dose. 3ss-3i	Dose. 5ii-5i	Gargle and External only
1/2 oz.....	.25	.20	.15	.10	.10
1 oz.....	.35	.30	.20	.15	.10
2 oz.....	.45	.35	.25	.20	.15
3 oz.....	...	.40	.30	.25	.20
4 oz.....	...	...	.35	.30	.25
6 oz.....	...	...	.40	.35	.30
8 oz.....	...	...	.45	.40	.35
12 oz.....	...	...	.55	.45	.40
16 oz.....	...	...	.60	.55	.50
32 oz.....	...	...	.75	.70	.65

2.—*Proprietaries*—Original package, regular retail price. When costing over \$2, \$4 or \$8 per dozen, add 65 per cent. to cost. When transferred to new container, add 15 per cent. to regular retail price. When part of package is dispensed, double cost of amount used and add charge for container (see below).

3.—*Dry Mixtures*—Minimum charge, 15c. These figures are compounding fees only. Pills, Powders, Capsules, Wafers, etc.
 Number 4 6 8 10 12 15 20 24 30 40 50
 Fee (revised)... 15c 20c 25c 30c 35c 40c 45c 50c 60c 75c 90c

Then every additional 25 up to one hundred, 25c. After that 20c for every additional 25.

Where powders are prescribed by the ounce, charge as follows for compounding fee: 1 oz., 25c; 2 oz., 35c; 3 oz., 40c; 4 oz., 45c; 6 oz., 50c; 8 oz., 55c; 12 oz., 65c; 16 oz., 75c, etc.

Proprietaries costing 20c per hundred or less, 10c for labeling and package, and 15c for 1 doz., 25c for 2 doz., 35c for 3 doz., 40c for 4 doz., then 5c for each additional dozen. Costing over 20c and under 50c per hundred, 10c for labeling and package, and 20c for 1 doz., 35c for 2 doz., 50c for 3 doz., 60c for 4 doz., then 10c for each additional dozen. When the wholesale price is over 50c per hundred, special rates may be made.

4.—*Fatty Mixtures, etc.*—Ointments and Cerates.

1/2 oz....	.20	2 oz....	.35	4 oz....	.55	8 oz....	.75
1 oz....	.25	3 oz....	.45	6 oz....	.65	16 oz....	1.00

Suppositories, Bougies, etc.

1.....	.20	5.....	.45	12.....	.75	24.....	1.35
2.....	.30	6.....	.50	15.....	.90	30.....	1.60
3.....	.35	8.....	.60	18.....	1.05	36.....	1.80
4.....	.40	10.....	.65	21.....	1.20		

5.—*Veterinary*.—Allow a discount of 25% from the regular schedule on compounding fee only, except that for bulk powders the minimum charge be 25c for compounding.

6.—*Household Remedies, Mixtures, etc.*—Add regular retail price of ingredients (none less than 5c) and charge for container. If any compounding is necessary, charge at rate of \$1.50 per hour.

7.—*Containers*—Pill and Powder Boxes, 5c. Ointment Boxes, 5c. Ointment Jars, 1 oz., 5c; 2-4 oz., 10c; 8 oz., 15c. Bottles, 8 oz., or less, 5c; 10-16 oz., 10c; 32 oz., 15c; $\frac{1}{2}$ gal., 20c; 1 gal., 25c. Glass Stoppered Bottles, three times the price of plain bottles.

8.—*Marking Price of Prescriptions*.—If a prescription or copy leaves your store, mark it with N. A. R. D. price, as follows:

P	H	A	R	M	O	C	I	S	T
1	2	3	4	5	6	7	8	9	0

9.—*Admissable Changes*.—If customer is poor, add a star (*) to price mark, showing you have gone below Schedule Price. If your present prices are lower than above, raise them gradually to Schedule Prices.

10.—*How to Fix Price. This is Important*.—The price of the Prescription is the Compounding Fee, plus the cost of the container, plus twice the cost of the material. (Exception: When the cost of material is over \$1.00, multiply cost by $1\frac{1}{2}$ instead of 2; and further, if the cost is over 50c and under \$1.00, adopt the following sliding scale: Cost 60c, add \$1.10; cost 70c, add \$1.20; cost 80c, add \$1.30; cost 90c, add \$1.40. These prices are based on an approximate \$1.50 per hour scale.

Example.—If the ingredients of a four-ounce mixture cost 12c, compute price as follows: Compounding fee, 35c plus container, 5c plus twice cost of material, 25c (12×2)—total, 65c.

GRAIN RECEIPTS AT BUFFALO.—Mr. Junius S. Smith, Lake Weighmaster of the Buffalo Corn Exchange, reports for 1912 the receipts of 108 million bushels of wheat and of other grains up to nearly 160 millions, total. On the average estimate of a barrel of flour or five bushels of wheat per capita per annum, the elevators of Buffalo handle the cereal food of approximately 25 million persons.

GIANTESS DEAD.—Emma Ewing died last month in Gorin, Mo., aged 30. She was of usual stature till her ninth year. Her height was 8 feet 4 inches.

SOCIETY MEETINGS.

THE EIGHTH DISTRICT DENTAL SOCIETY, President Dr. Walter H. Ellis, and THE BUFFALO DENTAL ASSOCIATION, President, Dr. Wesley M. Backus, held a joint dinner meeting at the Hotel Statler, Buffalo, January 11. Dr. Charles W. Bayliss of Oneonta, President of the State Dental Society, spoke briefly, addressing his remarks especially to the younger members. John W. Van Allen, Esq., Chairman of the Industries Bureau of the Buffalo Chamber of Commerce, read a paper on Investments for the Professional Man. As physicians as well as dentists have been the prey of blue sky promoters, this paper will be printed in a subsequent issue. Dr. Arthur F. Isham showed stereopticon views of his trip to Japan last year.

THE SEVENTEENTH INTERNATIONAL CONGRESS OF MEDICINE will be held in London, August 5-12, 1913. Dr. Foveau de Courmelles of Paris, will report on the X-Rays and Radium in Gynaecology, and requests the profession to send him observations as soon as possible, addressing to 26 rue de Chauteaudun, Paris..

THE MEDICAL AND SURGICAL LEAGUE held a dinner meeting at the Hotel Statler, Buffalo, January 9. Dr. Frank Kleckner gave a paper on "The Tonsils, Their Hypertrophy and a Method of Enucleation." Drs. Wurtz and Michel were elected to membership.

THE BUFFALO ACADEMY OF MEDICINE has inaugurated the plan of subscription dinners, at moderate price, open to all members, for the entertainment of out-of-town speakers. The first dinner was held at the Hotel Statler, January 28, Dr. John A. Amyot, Director of the Laboratories of the Ontario Board of Health of Toronto, being the guest of honor. This is a reform for which we have personally pleaded for years. The original plan of making appropriations from the society funds for more or less private and necessarily limited entertainment was obviously objectionable. The resulting custom of placing the expense of entertainment upon certain officers has also been embarrassing in many ways, especially in that it has not been possible to arrange in an entirely satisfactory way for the meeting with the guest of those personally acquainted with him or professionally most desirous of the meeting. The present plan is fair to all, is from the guest's standpoint most gratifying—or at least the editor has personally liked that form of entertainment best when he has been the guest of out-of-town societies—and, most important of all, it does away with what in this country and in any profession, is a most regrettable tendency toward a cleavage into gentry and peasantry.

THE ELMIRA ACADEMY OF MEDICINE was organized in 1852. Meetings are held on the first Wednesday of each month, except July and August, the annual meeting being held in December. The President is Dr. Alexander Mark, the Secretary, Dr. Charles Haase, our Associate Editor. The membership consists of 63 active and 6 honorary fellows. On January 8, Dr. C. G. R. Jennings read a paper on "Apocynum"—a valuable though neglected drug—and Dr. E. T. Bush on "Post Graduate Work in N. Y. City."

THE HOSPITAL MEDICAL SOCIETY of Rochester held meetings January 2 and January 16. At the former, Dr. Ralph R. Fitch read on "Lateral Curvatures of the Spine: New Ideas." At the latter, Dr. Edmund C. Boddy read on "Medical Inspection in the Public Schools."

THE ROCHESTER PATHOLOGICAL SOCIETY met January 9, Dr. Frank F. Dow presenting a paper on "Conservatism."

THE ROCHESTER ACADEMY OF MEDICINE entertained Dr. Arthur D. Hirschfelder of Johns Hopkins University, at a dinner at the Rochester Club, January 8. Dr. Hirschfelder read a paper on "Some Clinical Features of Adams-Stokes Disease," illustrated by stereopticon. At the annual meeting at the Academy Home (a good name which is respectfully commended to other societies of similar nature—Ed.) officers were elected as follows: President, Charles E. Darrow, M. D.; Vice-Presidents, Lee A. Whitney, M. D., LeGrand A. Walker, M. D., Leighton R. Cornman, M. D., Clayton K. Haskell, M. D.; Secretary, Edward L. Hanes, M. D.; Treasurer, Wesley T. Mulligan, M. D.; Trustees, Edward B. Angell, M. D., Eugene H. Howard, M. D., Edward W. Mulligan, M. D.; Councillors, William B. Jones, M. D., Charles D. Young, M. D.; Member of Library Committee, Prof. Charles W. Dodge.

THE FEDERATION OF STATE MEDICAL BOARDS will hold its annual meeting at the Congress Hotel, Chicago, on Tuesday, February 15th, 1913.

Essayists, eminently qualified, will prepare papers upon the following subjects:

"Is Universal Reciprocity to be Desired?" "Should Medical Boards Require One or More Years of College Work Preliminary to the Study of Medicine?" "Should One or More Years in a Hospital be Required for Admission to the Examination for Medical Licensure?" "Rules and Regulations Governing Examinations for Medical Licensure." "Qualification of Examiners."

"What Fee Should be Required for the Examination?" "Benefit of Having a Single Federation of State Medical Boards and Method of State Board Record Keeping." "Means of Keeping Politics Out of State Board Affairs."

An invitation is extended to members of State Medical Examining and Licensing Boards, teachers in medical schools, colleges and universities, delegates to the Council on Medical Education of the A. M. A., to the Association of American Medical Colleges and all others interested in securing the best results in medical education and legislation.

The officers of the Federation are Arthur B. Brown, M. D., President, New Orleans; George H. Matson, M. D., Secretary-Treasurer, Columbus (State House), Ohio; James A. Duncan, M. D., Chairman Executive Committee, Toledo.

OUR CONTEMPORARIES.

The National Journal of Medicine and Surgery begins Volume 107 with January, 1913. It was established 62 years ago (apparently starting with annual and changing to semi-annual volumes). We extend congratulations to one of the very few extant journals approaching our own age.

DR. DE LANCEY ROCHESTER of Buffalo contributes an excellent article on the Management of Pneumonia to the *Medical Council* of January, 1913.

THE ALBANY MEDICAL ANNALS, January, 1913, publishes an elaborate illustrated article on fracture of the femoral neck, by Dr. C. E. Ruth of Des Moines, too long for abstracting but deserving the attention of every surgeon.

THE N. Y. REAL ESTATE JOURNAL, January 15, 1913, contains an interesting article on Industrial Buffalo by Mr. Frederick H. Rice, Secretary of the Buffalo Real Estate Association.

PERSONALS.

Dr. A. S. Couch of Fredonia was the guest of honor at the Masonic Club rooms in January. In commemoration of the 50th anniversary of his service as officiating master of Forest Lodge, F. & A. M., he was presented with congratulations engrossed on parchment and with a past master's jewel.

Dr. William M. Hamilton has been elected Mayor of St. Catharines.

Dr. Rene Gaultier, our Associate Editor, of Paris, has been spending some time in Rome, whence he sends greetings.

Dr. A. F. Luhr of Buffalo has moved to 22 N. Pearl St., the former location of Dr. Keiser. He will devote his attention to the eye, ear, nose and throat.

Dr. W. E. Dake announces the removal of his office to 174 East Avenue, Rochester.

Dr. Joseph C. O'Gorman of Buffalo has received the permanent appointment of Medical School Examiner at a salary of \$1000.

Dr. Henry Smoyer, City Treasurer of North Tonawanda, is making an extended tour of the West Indies. He will visit Dr. H. C. Leonhardt of Porto Rico, formerly of North Tonawanda.

Dr. E. B. Becker of Summerville, Mass., visited his family in Buffalo during the holidays.

Dr. Pemberton Lundy has been appointed Health Commissioner of North Tonawanda.

Major Wm. G. Bissell, M. D., City Bacteriologist of Buffalo, has returned after taking a post graduate course at the Army Medical School at Washington.

Dr. W. J. Moore of Westfield has been spending some weeks at Atlantic City.

Dr. T. M. Johnson of Buffalo has been elected Surgeon of Bidwell-Wilkeson Post, G. A. R.

Dr. H. H. Glosser of Buffalo has recently returned from a trip to North Carolina.

Dr. Henry D. Wilson, formerly of Boston, has been assigned to the Naval Recruiting Station at Buffalo, in place of Dr. E. L. Bogart.

Dr. G. H. Sherman of Detroit, the manufacturer of vaccines, has been in London, Eng., for a month.

Dr. Roswell Park of Buffalo is out of town.

Dr. L. H. Snow of Jamestown was wounded in the face in a collision between his auto and a street car, January 3.

Dr. C. E. Rose of Buffalo had about \$150 worth of jewelry stolen from his home on the night of December 23.

Dr. Lucien Howe of Buffalo delivered a popular lecture at the University Building, January 12, on the "Progress of Medicine and Surgery."

Dr. W. H. Annowski of Buffalo is about to take a trip to Florida.

Dr. Alice Parker of Chicago recently visited her son, Dr. R. Emerson Parker of Jamestown.

Dr. C. Everett Field of Brooklyn, though still in private practice, has recently left the advertising department of Kress & Owen, to take the presidency of the Holeytheol Co., 24 Cliff St., N. Y. Dr. Field is a member of the A. M. A. and its component societies and is a founder and the President of the People's Forum, as well as the organizer of Temple Forum.

Dr. Richard Kovacs of 236 E. 69th St., N. Y. City, is organizing a Physicians' Travel-Study tour.

Dr. J. C. Clemesha of Buffalo is in southern California, expecting to return about February 10.

Rev. Philip L. Frick, D. D., of the Delaware Avenue M. E. Church, Buffalo, delivered an address on Dr. Grenfell, Christian Physician, January 19, in a course on "The Acts of Some Modern Apostles."

Dr. John L. Eckel announces the opening of his office at 143 Allen St., Buffalo. Practice limited to mental and nervous diseases.

Dr. Yamei Kin of China lectured in Buffalo on the social status of women in China, last month. She was the guest of Dr. and Mrs. W. H. Marcy.

Dr. A. T. Leonard of North Tonawanda is in Hot Springs, Ark.

Dr. Willes E. Ford of Utica has resigned as medical director of St. Luke's Hospital, but will remain a member of the board. Mr George W. Wilson, late Asst. Supt. of Roosevelt Hospital, will succeed him.

OBITUARIES.

Dr. William Henry Watson, Hahnemann, 1884, died at his home in Utica, January 2, aged 83.

Dr. Adelbert John Douglass, L. I. C. Hospital, 1879, died at his home in Ileon, N. Y., in November, 1912.

Dr. Ernest Byron Smith, Cleveland Homoeopathic Medical College, 1882, of Erie, Pa., died at the Buffalo General Hospital, December 11, 1912, from cancer, aged 52.

Dr. Wm. G. Maguire (years of practice) died in Tuscola, Ill., November 29, 1912, aged 99. He was the father of twenty-three children.

The editor has been appointed to the Committee on Necrology of the Medical Society of the County of Erie, N. Y. It is understood that the appointment is not an honor but an assignment to service such as every member is glad to perform as a matter of public spirit. As the BUFFALO MEDICAL JOURNAL is trying to publish all changes in the personel of the profession of Western New York, this duty can be discharged without much additional effort, but, obviously, the necessary information must be supplied by immediate friends and members of families. The editor frankly admits his inability to write the eulogistic and religious matter so often injected into obituaries, and wishes to state in advance that the general limitation of obituaries to biographic, genealogic and statistic details in as condensed form as possible, will not indicate a lack of proper feeling nor a failure to appreciate the worth of the deceased.

Dr. Jean E. Brooks of Binghamton, Louisville, 1888, is reported deceased by the P. O. department.

Dr. Frank R. Post of Port Crane, committed suicide, Christmas Day, from despondency, his daughter having been burned to death a few months ago.

Our readers are requested to inform the families of deceased physicians that obituary notices will be inserted without charge. Portrait cuts will be used if desired or will be prepared from photographs at cost.

Dr. W. L. Willett died at his home in Buffalo, January 5. He was formerly Superintendent of the N. Y. State Custodial Asylum at Newark, and was also postmaster of Newark, N. Y., for four years. He served as a private and corporal during the Civil War. He was 72 years old.

Rev. Albert Carrier Bunn, M. D., Buffalo, 1867, late Rector of St. Matthew's at Brooklyn Manor, Borough of Queens, died December 24 at Ashville, N. C. He was educated at Hobart College and was ordained to the priesthood of the Episcopal Church in 1882. He served as a medical missionary at Wuchang, China, 1874-9, and established St. Peter's and the Elizabeth Bunn Hospitals.

BOOK REVIEWS

DISEASES OF THE EYES: C. Devereux Marshall, F. R. C. S., London. University of London Press; Oxford University Press, American Branch, 35 W. 32, N. Y.; 303 pages, 95 illustrations, \$3.75.

This is a well prepared, systematic treatise which emphasises no hobbies and, from the practical method of presenting successive subjects, is especially suited to the needs of the general practitioner or of one in the transition period from general to special practice. The expert ophthalmologist will also find it valuable.

TEXT BOOK OF OPHTHALMOLOGY, in the form of clinical lectures. Dr. Paul Roemer of Greifswald, translated by Dr. Matthias Lanckton Foster. The Rebman Co., N. Y.; 571 large pages. 186 illustrations in the text and 13 colored plates. Vol. 2. Diseases of the Lids, Injuries. Vitreous, Sclera, Lachrymal Organs, Orbit, Glaucoma, Strabismus, \$2.50.

We have already reviewed the first volume. In scope and attention to detail, this work is cyclopaedic while the clinical method and elaborate illustration facilitate the work of the student. It is one of the most elaborate and thorough treatises that we have seen for some time in any branch of medicine.

TRANSACTIONS OF THE AMERICAN SURGICAL ASSOCIATION, Vol. 13, edited by Archbald MacLaren, Recorder. Printed for the Association by Wm. J. Dornan, Philadelphia; 758 pages, illustrated.

It is not without regret that we review a volume of this kind. Such transactions involve a considerable expense to the members, especially when of such limited numbers. This is a comparatively unimportant point, but so large a mass of literature of the highest grade ought to be published in mediums available to a larger audience.

BUFFALO MEDICAL JOURNAL

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ORIGINAL ARTICLES

A Report of Fourteen Cases of Spina Bifida and One of Sacrococcygeal Tumor

By DR. ROSWELL PARK
Buffalo

THE following group of cases of the always interesting condition of spina bifida, including spinal meningocele, operated by myself at the hospital within the recent past, may be considered a fairly typical presentation of results obtained, and previously to the introduction of the most recent methods of affording additional protection by means of autoplasmic or heteroplasmic bone-grafting or transplantation. While this latter is not always practicable, these cases reported may serve as an illustration of results secured by methods which are not obsolete, and may yet well serve the purpose when indicated.

Case 1. (10451)—L. W., aged six weeks, Town Line, N. Y. Sent to my clinic by Dr. John Miller. Distinct spina bifida involving the lower cervical and upper dorsal region; the presenting tumor being about size of a hen's egg. Its central portion is translucent, and presents scar-like appearances, possibly from old amniotic adhesions. In other respects the child is healthy and well-formed. The base of the tumor externally and laterally measures about one and one-half inches.

March 22d, 1902, I made complete excision of the sac, which proved to have a quite small pedicle. This was ligated, but the ligature shortly slipped through the aperture, and it was found that there was a defect in the posterior arches of the vertebrae. The dura was closed with catgut sutures, then a small piece of very thin ivory plate (such as is used by miniature painters) was suitably fashioned and slipped beneath the edges of the bony defect. Over this the spinal aponeurosis and other tissues were closed with catgut sutures.

The child did not seem to suffer unduly from shock, and made a rapid recovery, remaining well for eighteen months, then dying of spinal meningitis, as I am informed, though unable to ascertain any of the data pertaining to this last illness. At all events this was a complete recovery from the operation.

Case 2. (10533)—C. S., aged ten weeks. This case was operated at Bradford, Penna. It was one of congenital tumor of

the lower sacral region, proving to be a spina bifida, with relatively large deposit of fat around the margins, while the posterior surface was thin, translucent, and threatening to rupture. The size of the tumor was about that of a hen's egg. In other respects the child was in normal condition.

May 30th, 1902, I operated at the home, during the evening. The tumor proved to have a very small, tubular connection with the spinal canal of the sacrum, being not more than a quarter of an inch in diameter; thus it was an easy thing to dissect off the greater portion of the external mass, to ligate the communicating tube, and to close and fortify the opening by drawing the deep parts together with thin silver wire, the exterior being closed as usual, and without drain.

This child made rapid and complete recovery.

Case 3. (10754)—W. R., aged six weeks, 198 Hickory street, city. This patient was delivered, by Dr. Delancy Rochester, from a healthy mother, and was in other respects normal. At birth a small spina bifida was noted in the sacral region. Later she came under the care of Dr. Bartow, with whom I saw her December 30th, 1902. At this time the tumor had attained the size of a split orange, and its walls were very thin.

On the following day (Dec. 31, 1902) I excised the sac, finding the opening by which it connected with the spinal canal to be about the size of a lead pencil. There was in addition a defect in the posterior arches of the sacral vertebrae, of nearly the size of a nickel five cent piece. After closing the sac proper with sutures and ligatures, and refreshing the edges of the bony opening, I insterted a plate of thin celluloid, fashioning it to fit the opening (about two by three cm.), and over this closed the tissues, layer by layer, with buried sutures, using externally three retaining sutures of silk.

This child made a complete recovery.

Case 4. (10813)—M. L. B., aged two days, 129 Hawley street, city. Case seen with Dr. Myrtie Hoag. Spina bifida, with tumor about area of a silver dollar, situated in the lumbar region. Its walls were quite thin, and there was a well marked circular groove or excavation around and beneath the margin of the sac. Its surface was already excoriated, and I suggested an antiseptic and astringent powder for local dressing until arrangements could be made for operation.

Five weeks later, the cyst having rapidly increased in size, I operated, March 14th, 1903. Dissection of the sac showed that it was a case of meningo-myelocoele. I dissected out the nerves which adhered to the sac wall as well as I could, and then found a defect in the spinal canal 3 cm. long and 2 cm. wide. Into

this I fitted a celluloid plate and then over it closed the tissues layer by layer, using two silk retaining sutures externally.

Recovery was rapid and uneventful. Six weeks later it was reported to me that the child was in excellent condition so far as the spine was concerned, but had gradually developed a condition of hydrocephalus.

Case 5 (10971)—B. T., aged eight days, Lockport, N. Y. At birth this infant presented a lumbo-sacral meningocele, the size of a hen's egg. It had very thin covering and rupture was imminent.

Accordingly, eight days after birth, on May 25th, 1903, I operated at the General Hospital. It was a simple matter to excise the sac, whose communication with the spinal canal was very small and easily tied off. The periosteal margins of the spinal defect were closed over the stump of the sac, and the balance of the wound with layer sutures, without drainage.

Five days after the operation the child was sent home in good condition, without complications.

Months later a picture of the child was sent me which showed her to be in the best of health and, apparently, in perfect condition.

Case 6. (11330)—B. K., aged three months, 46 Austin street, city. This patient was referred to me by the late Dr. Eva Mead. There was a very thin-walled cyst occupying the lower half of the spinal column, its dimensions being about 13cm. in length and 7 cm. in breadth, protruding about 2 cm. above the surrounding level, and quite translucent. This had grown rapidly since birth. The child moves her legs but very little, and is only fairly well nourished, having been fed upon the bottle.

May 24th, 1904, I operated by first splitting the sac in the middle, finding it to consist of irregular, multilocular cysts. Further dissection revealed a complete defect from the mid-dorsal region down to the third sacral level. At the lower part the cord and the cauda equina lay exposed, with branches of the latter adhering posteriorly to the sac wall. These I was able to separate and to then turn in the edges of the sac in such a way as to leave a good margin for suturing. In this way I replaced the cord, at its termination, within the defect. The margins of the long and narrow spinal defect were then split, the periosteum and a very thin layer of bone being left, and a strip was dissected on each side; these strips I was able to bring together over the cord and then, by careful suturing, to construct an apparently reliable covering for the bony opening. The tissues outside of this were closed by layers and, as usual, no

drain was inserted. The patient bore the operation without undue shock and recovered promptly from the anesthetic.

Eighteen hours later she died suddenly, and without ascertained cause, no autopsy being permitted.

Case 7. (11595)—B. H., aged six days, 11 Lord street, city. This patient was referred to me by Dr. Van Peyma, who delivered the mother January 9th, 1905. The infant was healthy in every other respect, but presented at the lumbar region, at birth, a spina meningocele about the size of a small hen's egg, with exceedingly thin and fragile walls, which threatened to rupture on the slightest pressure. The patient was seen by me January 11th, and operation urged.

January 12th, 1905, I gave the child one-half cc. of paregoric subcutaneously, then injected into the sac one-half c.c. of 1 per cent. cocaine solution, and five minutes later proceeded to operate. The sac proved to have a very small funnel-shaped neck, and it was possible to isolate this and throw around it a catgut ligature, thus permitting excision of the sac without leakage. The spinal defect was quite small, and I made no attempt to minutely interfere with it. Layer sutures were inserted, and the child seemed to bear the operation without perceptible shock.

Nevertheless she died on the following day, in convulsions.

Case 8. (11893)—R. A., aged four months, North Collins, N. Y. Patient sent to me by Dr. Odell. In the lumbo-sacral region there is a very distinct meningocele of about the size of a hen's egg, which seems to be growing at a relatively faster rate than the rest of the child's body, so that it has seemed inexpedient to wait longer before operating. The skin covering is quite thick and uninfected, and the child is otherwise in good condition, though bottle fed.

November 9th, 1905, the child being placed with the down-hanging head, I made complete extirpation of the sac, finding it to contain nothing but fluid, save a few strands of fibrous tissue or trabeculae running across or through it. The opening into the spinal canal admitted only the point of the forceps. With chisel a small area of adjoining bone was detached on each side of this opening, and these pieces were then fastened together with buried chromic sutures. These also were used for closing the balance of the wound—by layers.

This child made rapid and satisfactory recovery.

Case 9. (12548)—H. W., aged five months, Austin, Penna. This child was sent to me by Dr. J. H. Page, presenting a tumor in the sacral region, 3 cm. in length and elevated 5 cm. above the surface, i.e., evidently a thick walled spina bifida of the

terminal portion of the spinal canal, its walls being too thick to make it even translucent. The child presented no other anomalies save a slight degree of hypospadias. (Fig. 1.)



FIG. 1

November 30th, 1907, I found a thick-walled sac, as above, with relatively small communicating opening at the lower end of the spinal canal. With a portion of the deep fibrous texture I made a plug which I pushed into the lower end of the canal and held there by sutures. Then the bony margins were partially denuded and detached and brought together over this plug.

This child went home in nine days apparently well.

Case 10. (12706)—E. P., aged two weeks, Newfane, N. Y. Patient referred by Dr. Shoemaker. At about the mid-dorsal region there is a tumor a little larger than a hen's egg, rather pedunculated, i.e., a spina bifida (meningocele) with relatively thick walls. Dr. Shoemaker tells me that when the child was born a portion of this mass was torn loose, and that he replaced it and held it in place with stitches which did not pull out, i.e.,

which served their purpose. Infant otherwise in good condition.

April 2d, 1908, I excised the sac and its overlying skin, finding the opening of communication to be quite small, so small in fact as hardly to call for any plastic work upon bone or even periosteum. The deeper part of the sac was then infolded and closed with sutures, likewise the other tissues above it, in layers.

Rapid recovery.

Case 11. (12775)—E. M. E., aged seven weeks, Kennedy, N.Y. Second child, large, well-developed for his age, normal in other respects save for presence of a large, thin-walled meningocele occupying the sacral region, its base being 6 cm. in diameter, sessile, with already ulcerating overlying skin.

June 17th, 1908, complete excision of the sac, the communicating opening barely admitting an ordinary probe. The interior of the sac was made up of compartments all containing cerebro-spinal fluid. This arrangement did not permit simple ligation of the neck of the sac, but by numerous buried sutures it was possible to obliterate its interior, and then to close the exterior as usual.

Rapid recovery.

Case 12. (12768)—B. H., aged three weeks, Lockport, N. Y. Referred to me by Dr. Shoemaker of Newfane. Child weighed twelve pounds at birth. Is well developed; the only congenital defect being a meningocele of the sacral region. A sac about the size of a flattened hen's egg, quite sessile, the overlying skin very tough and firm. Below the sac is a well marked pilo-nidal sinus.

June 11th, 1908, at Lockport Hospital, I made complete excision of the sac, finding but a small communicating opening, the interior of the cyst being arranged in compartments, like the previous case, and containing cerebro-spinal fluid. Ligation of the neck of the neck of the sac and separate suture of the tissue layers completed the operation. Curetting of the pilo-nidal sinus.

Complete recovery.

Case 13.—G. D., aged two and one-half years, 112 Arkansas street, city. Referred to me by Dr. Waldurf. Was first seen by me in spring of 1909, when I found a small, thickly-covered spina bifida at the lumbo-sacral junction. Below the tumor was a small, distinct, pilo-nidal sinus. At this time the child appeared in perfect health, with limbs normal in shape and function.

By November, 1909, there was well marked equino-varus of left foot with some arrest of development in the muscles of that limb.

November 13th, 1909, I ligated the neck of the sac after dissecting through nearly an inch of fatty tissue. The total amount of sac wall was so small that I used it as a plug with which to close the opening, for which purpose it just sufficed. The tissues were brought together in layers as usual, superfluous skin being removed. The sinus was also curetted. At the same time I did tenotomy of tendo Achillis of the left foot.

This patient did well for two weeks, and the wound had apparently healed; suddenly there occurred sloughing, accompanied by high temperature, vomiting and intestinal symptoms. With these she grew rapidly worse and died in coma, with high temperature, the cause of this accident not being explainable.

Case 14. (12945)—M. J. B., aged twenty-three years 451 Swan street, city. This is the only adult in this series of cases. He was, by occupation a telegrapher, well in other respects,



FIG. 2

but with an irregular, fluctuating meningocele, six inches in length and between two and three in breadth, the sac wall being quite thin and almost translucent. Pressure upon the tumor caused unpleasant head symptoms, and on this account and because of the delicate cyst covering he has been constantly obliged to guard himself against accident, and it seems remarkable that he has escaped it. He was referred to me by Dr. Russell. (Fig. 2.)

March 30th, 1909, I made complete extirpation of the sac, finding that the opening into the spinal canal above the sacrum,

was about one and one-quarter inches in length and one-half this in breadth. It was possible to secure the neck of the sac with a ligature. I dissected away a portion exterior to this in order to turn in the stump of the sac with sutures, and then to raise a flap of firm fascia on each side, with which I could make a double covering for the same. The balance of the wound was closed as usual, and without drainage.

This patient made a somewhat tardy but complete recovery, and soon returned to his work freed from the necessity for taking his former precautions.

TERATOMA OF COCCYX.

The following is a case of congenital *sacro-coccygeal tumor* which does not belong to the previous series of cases, but is reported here for its intrinsic interest.



FIG. 3

Case. B. J. (12707)—Aged four days, 464 William street, city. The mother of this child, previously healthy, had no family history bearing on the case. Was delivered by Dr. Kavinoky on the morning of March 31st, 1908. The presence of an abnormal

growth was made known before delivery of the child; within a few hours after birth she was sent to the General Hospital. The condition is perhaps best described by the accompanying figure. It consisted of a large tumor occupying the sacro-coccygeal region, the tumor itself almost as large as the infant's body, more or less movable, with quite motile overlying skin, the cutaneous veins being large and full. In other respects the child seemed normal. Evacuation of bladder and bowels apparently in no wise disturbed by presence of the tumor. The anus was made to appear rather on the anterior aspect of the growth than in the inter-gluteal fold. Fluoroscopic examination gave no indication of bone involvement, and it seemed to be a teratomatous, multicystic mass. (Fig. 3.)

On the morning of April 4th, 1908, a spontaneous hemorrhage occurred from the lower surface of the growth, where ulceration had threatened the previous day; consequently I determined to wait no longer.

April 4th, 1908, in clinic, an occasional whiff of ether being all that was required, I dissected out the mass, saving enough of the surrounding skin to permit the closure of the defect made by its removal. There was but little loss of blood, nor was there any particular difficulty during removal of the growth, the result being its extirpation with far less difficulty than had been anticipated. It had extended within the pelvis, between the rectum and the sacrum, but even from this sheltered location it was easily enucleated. Only a few buried sutures were required to completely close the cavity, as well as to check hemorrhage, and the child seemed to bear the operation very well.

It died, however, a few hours later, apparently of collapse. The amount of blood lost during the hemorrhage was relatively much greater than that lost during the operation. Had the latter been done first there is every reason to think that the child would have survived.

COMMENT.

Summarizing these cases it will be seen that out of fourteen cases of spina bifida, some of them quite unpromising, only three died as result of operation or from cause in any way connected with it. The last case, i.e., that of coccygeal tumor, was simply done as a forlorn hope. One has always in such cases to contend with the magnitude of the tumor and the very low resistance of the subject. A study of such cases as this last one would be extremely interesting, but would take one too far away from a mere clinical report, and too deeply into the yet fascinating study of *teratology*, to which there is no visible limit.

With the exception of one case, in which cocaine anesthesia

was employed, they were done under just enough general anesthetic to suffice for the purpose, there being good reason for the most sparing possible use of ether and chloroform in these young infants. Every possible precaution was taken to hermetically seal the wounds in such way as to avoid infection from without. When ulceration has already occurred the value of the best precautions is necessarily diminished.

It will be seen that no effort was made in any of them at grafting or hetroplastic measures, since the insertion of celluloid or even of ivory for this purpose can hardly be placed in the same category with the use of living or but recently dead tissue. Modern methods of the very latest device now contemplate utilization of living bone, either from the same patient, or from another, or from some animal source. Thus, and for instance, a section of rib can be removed from the patient's own thorax, and be made available for closing most of the openings into the spinal canal which these cases present. If not from this source from some other animal, at least, the bone may be procured which shall better serve the purpose than the inert materials hitherto in use.

In not one of these cases was this defect nearly as extensive as in several others that I have seen and some that I have operated; in one, for instance, of which I made a cast that is now in the College Museum, where the tumor on the back was actually as large as the child's head, if in fact the cubic content were not greater. Even this case was subjected to operation, but ulceration and infection had already occurred, and the result was only such as might have been expected. Midwives and nurses need to be instructed, as well as possibly the younger men in the profession, regarding the extreme care which should be taken to avoid rupturing these sacs during confinement, or during the manipulations inseparable from the proper care of the new-born. The skin is so extremely tender, the covering membrane often so thin, and the mother's ignorance so great that not only care but proper teaching or training of mothers and nurse-maids needs to be made a necessary part of the daily routine.

MESBE IN TUBERCULOSIS. G. Hermann, *Münch. Med. Woch.*, page 1849, vol. 59, 1912. Three cases of ulcerations of nares, larynx and mastoid, respectively, successfully treated with an extract of Mesbe (*sida rhombifolia cubilguitziana*). No exact statement of strength, dosage, etc.

The Psychologic Side of Anesthesia

By DR. HARRY R. TRICK
Buffalo

THE introduction of the modern inhalation anesthetics brought with it a problem that has not yet been solved. This problem is how to obtain the desired effects of anesthetics and eliminate the lethal effects—in other words, what can we do to insure the safety of the patient?

Many attempts have been made to modify the toxicity of these agents by combining them in various ways, but the resulting mixture has never proved to be any more satisfactory than its several elements used alone or in sequence, so these mixtures have never attained a permanent popularity.

Also, a great variety of mechanical devices have been produced to deliver the drug in measured amounts and in pleasanter form, but the machine does not prevent over-administration.

Since we cannot change the properties of these drugs, not devise machines that will relieve us of responsibility during their administration, we must look elsewhere for the solution of the problem.

The administration of an anesthetic implies either that there is need for some surgical procedure or that there is some condition requiring the use of a drug of great potency for its relief. The dangers incident to or a part of such procedure or illness will always beset the patient, and deaths from such causes should not be charged to the anesthetic.

In the past, our statistics of anesthetics have not clearly differentiated between deaths due to an anesthetic and deaths during the administration of an anesthetic. The difference is obvious and no fair deduction can be drawn from them until some standard of what constitutes a death from an anesthetic has been established.

After a recent study of these statistics, covering the Crimean war and including all climates, Gwathmey reports that the inhalation anesthetics do not differ so much in their lethal qualities as we have been taught to believe, and that "no anesthetic death is possible today except from experimenting on new lines, or from carelessness or ignorance."

Professor Henderson of Yale says that the more he studies the situation the more convinced he becomes that deaths under anesthesia are not due to anesthetics but to anesthetists.

A little thought will show how nearly true these statements are, and suggests the need for a study of the individuals concerned in the production of the anesthetic state. Although the

methods of administration have been much improved, we still hear too much about the shock of the anesthetic.

It matters little which particular theory of shock we accept, whether it be the nerve exhaustion theory of Crile, the respiratory or acapnia theory of Henderson, the inhibition theory of Meltzer, or the cardiac and vascular theory of Howell and Bloodgood, the causes remain the same—namely, pain, hemorrhage, the toxic properties of anesthetics, exhaustion, fear and excitement.

In elective or deliberate surgery the first four causes are being successfully combated by careful handling of tissues, control of hemorrhage, minimal amounts of anesthetics and preliminary rest, but fear and excitement still remain.

Since fear and excitement are psychic disturbances, they should be treated by psycho-therapy. The use of morphine as a preliminary measure to deaden the perceptive centres has been very widely adopted but is open to some criticism as a routine practice; although it is said that even Bernheim does not hesitate to use it in intractable cases.

Morphine, moreover, comes relatively late in the pre-operative treatment of a case and should be used as a narcotic only when suggestion fails.

Fear and excitement begin their destructive processes with the first intimation of the need of an operation, and *then* is the time the psychologic side of the anesthetic should be begun, and every physician can adapt himself to the case at hand if he desires so to do. Any physician who simply tells a patient that he needs a certain operation fails in his duty. It is quite as important to picture an attractive outlook and to remind him of the blessings of the modern anesthetics.

The beneficial effect of suggestion is particularly striking in children. Only recently the writer had occasion to reduce a fracture of the radius in a ten-year-old boy whose reputation at home was that he was a "cry-baby." You will recognize the circumstances and the unattractive outlook. By actual count only 20 drops of chloroform were used to produce anesthesia, with no period of excitement and no subsequent vomiting. No morphine was used. This case is cited because it is so ordinary; it has no unusual features. Anyone can secure a similar result who is willing to take the time and will go into it enthusiastically; but he must be enthusiastic. In cases like the one just cited this method is an actual time-saver as well as a possible life-saver. In order to avoid frightening very young children they may be anesthetized while asleep, or while being held in the mother's arms.

During the first half of the nineteenth century a great many surgical procedures were successfully carried out with no other aid than suggestion, although it was called by another name, with no pain, and, strangest of all, with no shock. Dr. Eliotson in 1843 reported numerous cases of surgical operations without pain.

Bramwell reports a public demonstration of this method of producing anesthesia where the post-operative condition of the patients was so pleasant that in the words of the reporter "if it had not been for the bandages and splints one might have thought they were a picnic party."

Esdaile, while serving with the British Army in India, removed hundreds of the huge scrotal tumors peculiar to that part of the world, without pain and without shock. He performed many other major operations of his day, such as breast amputations, with uniform success, and others have done equally as well even in our own day. The literature of psycho-therapy is filled with such reports and affords interesting and inspiring reading.

It is generally conceded that in these various painless and shockless operations the anesthesia obtained was really the work of suggestion, no matter whether produced by passes, magnets, tractors, commands or mirrors. It all goes to prove that "man is a suggestible animal," and in the pre-anesthetic state he is peculiarly open to suggestion. His fear prompts him to grasp at every straw which might tend to increase his safety; therefore, he heeds our suggestions eagerly.

Suggestion does not consist entirely of verbal instruction, although it depends largely upon it. We seldom appreciate the importance of our deportment. The patient's fear is enhanced or allayed by the construction he puts on our actions and manner of speaking; so it behooves us to so act and speak that we inspire our patient with optimism. A patient's fear is seldom of the operation but often of the anesthetic and is largely due to his lack of information or imperfect information. This can be overcome to a great extent by proper instruction as to the nature and mode of action and method of administration of the particular anesthetic to be used, but bearing particularly upon the fact that a large part of the success depends upon the patient himself; showing him how non-resistance means a lessened amount of anesthetic and a pleasanter post-operative experience. This last statement makes a profound impression upon the minds of most patients and is frequently the only point to call to their especial attention. Be sure not to say too much. Over-solicitous concern may develop fear even in those who have no preformed ideas. If men in the past have succeeded in

producing anesthesia by suggestion, we certainly ought to be able to secure acquiescence to an anesthetic by its aid. Occasionally we find a case of unreasoning fear, when morphine is clearly needed.

Suggestion as used in this connection means instruction, advice, encouragement, and all other means for securing the faith of the patient. When the time arrives for the administration of the anesthetic the patient should again be reminded of his part; tell him something about the various sensations he will experience and that they are a perfectly natural thing to expect, but repeatedly advising him to go to sleep. A few drops of a 25 per cent. solution of the essence of orange on the mask, as suggested by Gwathmey and Woolsey, will overcome the odor of ether and thus favor early induction by ether.

The surroundings should be conducive to sleep; the anesthetic should be given in a quiet, darkened room; there should be no slamming of doors, and there should be no talking except by the anesthetist, in a soothing tone. If these few directions be followed the patient becomes practically *en rapport* with the anesthetist, and in most instances there will be no period of excitement.

But the benefits of suggestion do not end here. A responsive patient actually requires less anesthetic, suffers practically no shock and rarely vomits. The convalescence is much pleasanter and shorter than it otherwise would be. Local anesthetics are much more effective when combined with suggestion.

Boris Sidis, in his *Psychology of Suggestion* advances a theory that a patient in a state of "increased suggestibility" tends to prevent the transmission of noxious impulses by retraction of the neurons, with consequent loss of continuity of the nerve elements. No matter what the change in the nerve elements under suggestion may be it is more desirable than Crile's anoci-association, which it strongly suggests since the function is not inhibited by poisonous drugs. At any rate the removal of fear has been shown both clinically and experimentally to increase the patient's resistance to other shock-producing factors.

The good results reported in connection with the use of the various machines would very probably have been secured by the men who operate them if they had worked with the simplest form of administration, because their patients had faith in them and they had faith in themselves. In the last analysis an ideal anesthetization depends upon the anesthetist.

The use of suggestion as an anesthetic is not a practicable procedure in our modern operating-rooms, but there is no good reason why it should not be used in conjunction with anesthetics, thereby rendering small amounts more effective and avoiding

the danger of over-administration; and that is the only point in this paper, and the only plea is for its more extensive application.

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Anoci-Association	Crile
Suggestion as an Aid to Anesthetics.....	Munro

THE OPTOMETRY QUESTION. Louis Striker (abstracted from *Ophthalmology* of Oct., 1912, in *Jour. Oph. and Oto-Laryng.*) says that a united profession is necessary if we are to prevail in this fight. The general profession ought never to refer a case of refraction to an optician, a not uncommon practice today and on which opticians pride themselves. He is sure that no oculist would ever refuse to care for those unable to pay. The public needs to understand the subject. To many there is no difference between the oculist and the optician. It is high time that the public did know that the oculist is a physician.

TRACHOMA IN KENTUCKY. John McMullen, U. S. P. H. S. (Report to the Surgeon General) investigated the trachoma conditions in seven counties of the mountains of Eastern Kentucky. He examined nearly four thousand people, and 12½ per cent. were found to be suffering from trachoma. Others had reported as high as 25 per cent. infected. Corneal complications are very frequent. To those who doubt the wisdom of classifying trachoma as a dangerous communicable disease it is suggested that they visit this locality and see what a great handicap it imposes upon its victims. It has been stated that 75 per cent. of untreated cases result in blindness. Living conditions are extremely unhygienic, and there are few opportunities for proper treatment. Some time ago Dr. Bailey found that in the Kentucky Institution for the Blind 45 per cent. of the inmates were blind of trachoma.

Some Practical Points in the Diagnosis and Treatment of Acute and Chronic Aural Suppuration and Their Sequellae

By JAMES F. MCKERNON, M. D.
New York City

IN presenting this paper for your consideration this evening, I have been requested by your President to deal with the subject more from the standpoint of the general practitioner than from that of the specialist. In doing so I must crave your indulgence if I touch upon many phases of aural suppuration that are more or less familiar to you.

Frequently the general practitioner is called in to see a young child, with the history that the child has been restless, irritable and unable to sleep, with some accompanying temperature. This may have followed a cold, sore throat, tonsilitis or it may be independent of any previous general or local condition. Here a physical examination of the child is not complete unless it includes an examination of the ears, and when such an inspection is made one or both ears is frequently found involved in an acute inflammatory process which readily explains the cause of the little patient's discomfort and temperature.

It is a popular fallacy among many, that when an ear first becomes the seat of an acute inflammation, that the first symptom the child will complain of is pain, referred to the ear. Occasionally they will do so, but the majority of very young children will give no such evidence until several hours or days have elapsed, or until a discharge is noticed on the pillow, when the general systemic symptoms usually subside, or the aural condition is recognized by an early otoscopic examination.

Another phase of aural suppuration which is misleading, is to have an older child complain of sporadic attacks of earache, with an irregular temperature curve. Frequent physical examination eliminates the condition as being caused by one of the many systemic diseases usually looked for in childhood. The ears are finally subjected to an **examination because of the** occasional attacks of pain formerly complained of by the child.

In examining these cases, it is infrequent that a hasty aural inspection with an insufficient light is made, sometimes by one not well versed in otoscopic examinations, or as has many times been the case, the examination has been made hurriedly by the aurist, and the only thing noticed about the drum membrane as deviating from normal was that it was somewhat prominent, with absence of lustre, and looking, to use a common expression, "dead white." The examiner seeing such a condition, free from any acute congestion, usually gives some simple instructions for

the care of the child and takes his departure, saying there is no involvement of the ears.

Usually in a few hours afterward he is sent for, or telephoned that the child has a discharge from the ear. He visits the patient as soon as possible to find a rather profuse discharge from the ear that he had pronounced negative but a few hours before, and naturally thinks that the process must have been an unusually rapid one. Had he brought to his aid at the first examination a cotton-tipped probe, and gently brushed the surface of the drum membrane from above downward, he would have removed the dead-white, opaque looking surface, which is composed of exfoliated epithelium, due to pressure of fluid behind the drum membrane, and found a bulging, swollen and reddened drum, which should have been incised at once.

It is my firm belief that if every case of measles, diphtheria, scarlet fever, acute tonsilitis, pneumonia and typhoid fever, as well as many other of the acute diseases, were subjected to frequent otoscopic examinations during the course of the disease, that the best interests of the patients would be conserved, for many times during the course of one or more of these diseases such an examination would reveal the cause of an unexplained temperature.

For such frequent examination it is not necessary that an aurist be called. The general practitioner should be able to make these inspections and determine between the normal and pathological looking drum membrane and middle ear. It is in many of these systemic diseases that a slow, non-painful, insidious involvement of the ear takes place.

Another dangerous phase of acute aural suppuration in infants and young children is the continuation of an irregular temperature curve several days after the onset of an acute middle-ear involvement.

Take, for instance, a case where the drum membrane has ruptured spontaneously, or has been incised late in the course of an acute aural suppuration, and drainage of the middle-ear is complete, but in spite of free drainage and active antiphlogistic measures, an irregular temperature persists for several days, 99° F. to 100° F. in the morning, 100½° F. to 101° F. in the afternoon, or normal in the morning with a rise to 102° F. to 103° F. in the evening with a reversion to normal the next morning. Physical inspection of the ear shows the canal filled with pus, either creamy, or white and stringy, depending upon the characteristic bacterial infection producing the inflammation, and when the canal is cleansed of all secretion, there is noticed only a moderate amount of fulness of the posterior canal wall. The drum membrane is not bulging unduly, but simply showing an

oedematus and thickened condition, in fact few, if any, of the classical canal and middle ear signs of a mastoid involvement are present, yet if we watch such a middle ear and canal for from three to five minutes we will find the canal quickly filled to the meatus with the same characteristic secretion that was removed but a few moments before. Can anyone think for a moment that a cavity as small as that of the middle ear can hold such an amount of secretion?

The suppurative process has extended to the mastoid bone and the large amount of pus accumulating in the canal is passing through the middle ear from the suppurating process already existing in the mastoid structure. And this, with no external physical signs of bone involvement, such as tenderness upon pressure over the antrum or tip of the mastoid, or swelling or oedema over this structure.

Later when swelling and oedema does take place it is because the natural drainage to the mastoid antrum, "the aditus," has become blocked with granulation tissue, and there is a still more pronounced extension of the general mastoid structure; or a cortical perforation has taken place, allowing the pus to escape from the bony cavity upward beneath the periosteum, producing a sub-periosteal abscess.

It is practically impossible in these infants and younger children to elicit the symptom of pain upon pressure over the mastoid area. They will cry out and complain quite as much if pressure be exerted on the opposite side, or on top of the head as on the suspected side, and he who waits for these children to show a swelling over the mastoid, or a sub-periosteal accumulation, before advising an operation on the mastoid, is inviting one or more of the intra-cranial complications, that unfortunately follow in the wake of these neglected and delayed cases.

It was formerly said that when these sub-periosteal swellings occurred, the only treatment that was necessary was a free incision through the soft parts and periosteum to the bone—the so-called Wilde's incision.

Believing that such treatment was unsafe, I was enabled several years ago to prove, at least to myself, the danger of such a procedure.

In 166 cases of sub-periosteal abscess complicating acute and chronic aural suppuration in children, ranging in age from three to ten years, the mastoid was opened, and in 165 of the cases pus was found in the entrum and throughout the mastoid structure generally. In the single case where it was not present, the antrum was filled with granulation tissue, and the general osseous structure found red and softened. While some of these cases might have been relieved by the simple external incision, the majority would not, but would have been left with the

legacy of a running ear for the remainder of their lives, with impaired audition, and with favorable conditions for the subsequent development of one or more of the various intra-cranial complications, so frequently seen in neglected cases of this type.

In adult cases the otologist is frequently asked, what symptoms or physical signs are present that enable him to make a positive diagnosis of mastoid involvement?

They are the presence of a discharge from the ear of the affected side, or the history of such a discharge, partial or complete, prolapse of the posterior-superior canal wall, shutting off from view a portion of a bulging drum membrane, especially that part known as the posterior-superior quadrant, so that when we are examining the ear with the speculum this part looks nearer to us than the anterior-inferior quadrant, showing a decided narrowing of the lumen of the canal in its deeper third, tenderness upon pressure over the mastoid antrum, tip, or the exit of the emissary vein, occasionally tenderness upon pressure over the middle zygomatic root. In some cases the tenderness is pronounced only over the antrum and tip. If the case be one prolonged or delayed, then tenderness may be exhibited over any point where pressure is exerted.

Temperature depends entirely upon the stage at which the disease is seen. During the development of pus there is always a temperature. When pus has once formed in the mastoid cavity, there is usually a subsidence of all temperature, until complications begin to arise. This absence of temperature is often misleading, and is frequently the cause of much unnecessary delay and waiting. Here the physical signs of the canal and middle-ear, with surface tenderness at the points mentioned, is sufficient for a positive diagnosis. Occasionally we come in contact with cases, both in young children and adults, that do not exhibit any tenderness whatever upon pressure. This lack of sensitiveness is usually due to a very thick external cortex. Here the diagnosis is made from the canal and middle-ear changes alone.

At times we have only the history of a discharge having been present some two or three months previously, and no tenderness exhibited upon pressure. Here the diagnosis is made upon the canal changes already spoken of.

Audition is invariably diminished following the development of a suppuration in the mastoid, and varies with the extension of the disease. If of long standing, several weeks in duration, it steadily becomes worse, due no doubt to the excessive inflammatory changes that have taken place in the middle-ear cavity. Diffuse circumscribed external otitis, or ferunculosis of the external auditory canal, is sometimes mistaken for mastoid involvement, especially if it be well developed and has lasted

sufficiently long to cause a well marked oedema behind the auricle and over the mastoid process. Physical examination of the external auditory meatus reveals the lumen of the cartilaginous canal as well as the meatus encroached upon to a greater or less degree by a swelling in one or more of the canal walls. This swelling is excessively tender upon pressure. Pressure with the finger in front of the tragus, or underneath the lobe of the ear upward, or in the post aural fold toward the auricle all produce most exquisite pain. Movement of the auricle between the thumb and finger will produce a like effect.

Pressure over the oedematous mastoid swelling does not as a rule cause pain. Should the swelling be excessive and the pressure causing pain in this region, it is due to the swollen soft parts and not to the bone surface below. The treatment is free incision of the swollen area in the meatus and canal. The taking of a culture from the evacuated discharge, and then covering the entire ear and mastoid area with a plentiful supply of plain sterile gauze, soaked in a hot normal salt solution, covered with rubber tissue, and applying a bandage.

From the culture taken an autogenous vaccine is to be made and injected, to hasten resolution and prevent the formation of other circumscribed areas of infection. The infection is usually that of the *Staphylococcus* and the initial dose of the vaccine should be for the adult 500,000,000 bacteria, with subsequent doses, larger or smaller, every three or four days, depending upon the rapidity of resolution in the affected tissue.

Probably there is no aural disease that the general practitioner as well as the otologist is more frequently consulted about than that of a "running ear," and frequently in the past the patient has been told by his medical adviser to let it alone, and that nature would effect a cure. In some of the cases where there is absence of necrosis of the middle-ear structures and adjacent parts, nature will do much in effecting a cure. But, if necrosis of these structures be present, then their continuance means a menace to the well being and future health of the patient. In every case of a discharging ear coming under our observation, whether it be acute, sub-acute or chronic, a most careful examination should be made. First to discover the cause of the discharge, whether it be due to insufficient drainage alone, or if chronic, whether necrosis of the ossicular chain or adjacent structures exist. If drainage be insufficient, this should be corrected by a free incision of the drum membrane, followed by antiseptic and stimulating treatment on conservative lines, hoping thereby to bring about resolution and cure the suppuration. Formerly we were in the habit of performing an ossiculectomy in nearly every case of chronic otorrhoea that persisted after

conservative treatment, independent of whether the disease was confined to the ossicular chain or to the deeper structures, with the result that only a very small percentage of our cases were cured, namely, those in which the disease was confined to the ossicles alone.

The vast majority of our cases operated upon in this way continued to discharge, because it was impossible to reach the seat of the trouble by an operation performed through the external auditory canal, for when this was done areas of necrosis were left untouched in the attic, around the eustachian orifice, in the aditus, and in the mastoid bone itself. In many of these cases so operated upon a meningitis developed, due to the fact that there existed one or more perforations through the tegmen tympani, communicating with the dura above, the dura in this region having previously been the seat of a pachymeningitis which was nature's barrier for the time being, to any further progress of the suppuration in this direction.

Instrumental manipulation within the middle-ear during the ossiculectomy was sufficient to cause an irritation and re-infection of the dura which rapidly developed into a general and fatal purulent meningitis. Then again, in these cases of operation through the canal, it was not an infrequent occurrence, to injure the facial nerve by the instrumental manipulation that was carried on out of sight in the tympanic cavity, so that today if necrosis of the middle-ear be demonstrated by our examination, we invariably advise the patient to submit to the Stacke or radical operation, in order that the discharge may be cured, and that he may be placed on a safe basis from future intra-cranial developments.

Briefly stated, the causes demanding a radical operation of the middle-ear and structures adjacent thereto, are:

The presence of dead bone in the tympanic cavity. The presence of cholesteatomatous masses. Headache, *localized* or *general, on the affected side*. Vertigo of the intermittent type, associated with, at times, nausea and vomiting. Intermittent pain, or a dull, heavy, throbbing pain when drainage is obstructed. Unsteadiness of gait, and an intermittent or constant purulent discharge from the middle-ear, with a foul odor, indicative of necrotic bone.

Tinnitus is frequently present, and at times most distressing. Occasionally when the condition is of long standing there is considerable mental depression, almost a mild form of melancholia. Successive attacks of labyrinthine irritation during the course of a chronic suppuration in the middle-ear is an indication in itself sufficient for the performance of this operation.

I shall purposely omit mentioning the various functional tests

for diseases of the labyrinth, as I wish this paper to appeal more to the general medical man than to the specialist.

Another class of cases frequently coming to the operating table for the radical operation, is that of children giving the history of a discharge from the middle-ear for several months as a sequellae of grippe, measles, scarlet fever and other intercurrent diseases. In many of these cases persistent, conservative treatment has failed to bring about a cure. The adenoids and enlarged tonsils have been removed, hoping thereby, to lessen the mechanical irritation in the naso-pharynx, so that resolution will be established, but without success. If, instead of the radical operation being done on these children, the matoid were opened, the middle-ear drained posteriorily, and at the same time a free incision made in the drum membrane, the suppurative process would speedily cease, and what is of the utmost importance for the future of these young children, their hearing would be preserved, or vastly improved in the majority of cases; while if the radical operation had been done on these young children their future hearing would be very much diminished, if not entirely absent at the end of a year or two after such an operation.

During the last five years the writer has seen 106 cases of the above described type in children operated upon by the posterior method and all discharge cured except in ten cases. The audition in 84 cases was as perfect as that of the opposite side. Of the remaining twenty-two cases, the audition was improved in twelve. Six had to be operated upon again, the radical operation being done at the second sitting. The four remaining cases passed from under observation, and no trace of them was obtained for future reference.

The patient who contemplates having a radical operation performed usually asks four questions:

First: Will the discharge be cured? Second: Is it dangerous? Third: Will my face be paralyzed? Fourth: Will my hearing be improved?

The answer to the first question is: We expect that it will, although it may be necessary to do a second operation, in order to bring about a cure, depending upon the conditions that are found upon operation.

Second: We do not consider the operation a serious one, if no complications exist at the time of the operation, yet in every operation there is an element of danger.

Third: We do not expect injury to the facial nerve, although it is possible, owing to the fact that it may be exposed by extensive necrosis, and in removing such necrotic areas the nerve may be injured, or it may have an anomalous distribution, and receive injury on this account.

Fourth: The hearing in the vast majority of cases will not be improved, but worse than before operation, and practically useless as far as hearing conversation. I have never seen but two cases of permanent improvement in audition following the complete radical operation, and during the earlier days in which we performed this operation, I have many times heard the patient state that had he or she known their hearing would have been as poor as it then was, that they would never have had the operation done.

Such statements as these, however, should have but little weight when we compare their diminished audition to the probability of a dangerous intra-cranial condition occurring, in cases where advanced necrosis is present, for I do not know of any operation that offers such safety to the patient as does this, when the indications are distinct and definite for its performance.

[Continued next month]

ABSTRACTS.

THE CANCER PASTE has recently been revived and has been given a respectable status. A. Zeller, *Münch. Med. Woch.*, Aug. 20 and 27, 1912, reports 57 authentic cases, 44 cured, 3 dead, 10 still under treatment. After cleansing the surface with benzine, a paste containing arsenic and cinnabar is thickly applied, covered with collodion or a regular aseptic dressing and renewed every week or two. One-half gram each of sodium and potassium silicate, are administered t. i. d. and are continued for a year after apparent cure. (Note—As local treatment of cancer of this fashion is limited to external growths, easily diagnosed promptly, it seems best to adhere to extirpation except in neglected, inoperable cases. At the same time, the results of chemic and radiant treatment are suggestive for the future. The administration of soluble glasses in so large dose and for so long a time, leads to speculation as to the possible results of combination with lime.)

ATHLETICS AND HEALTH. Dr. Harlow Brookes of N. Y., *Am. Pract.*, November, 1912, considers that the college athlete ten years later, is physically below the average. In National Guard examinations he found in a single year only one of twelve famous athletes up to the standard and this one died in the early thirties from diabetes. (Note—The editor has always held the same opinion as to athletics, but recent literature has rather contradicted the theory as to the bad results of reducing hypertrophied voluntary and cardiac muscles to the equilibrium of ordinary business life.)

CIRCULAR RESECTION AND SUTURE OF THE AXILLARY ARTERY FOR TRANSVERSE LACERATION BY FRACTURE-DISLOCATION OF ANATOMICAL NECK OF THE HUMERUS. J. J. Buchanan, of Pittsburgh, *Surgery, Gynecology, and Obstetrics*, December, 1912. The case reported, of almost complete transverse laceration of the axillary artery, is unique in its causation. The patient is a man of 58, who sustained a fracture-dislocation of the anatomical neck of the humerus, by falling from a train. The diagnosis of the bony lesion was made with the X-ray, and an incision opening the axilla was made for removal of the entirely separated head. (Fig. 1.)

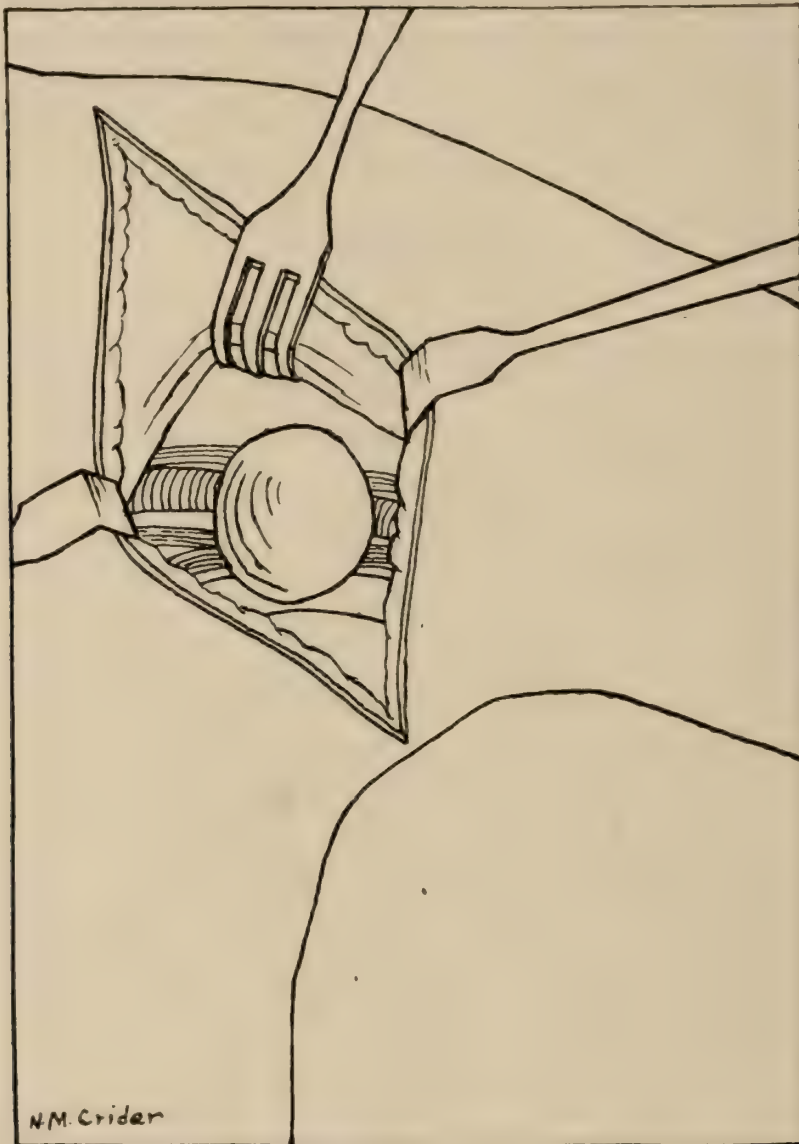


Fig. 1.

Gentle lifting of the head from its impacted position on the axillary vessels and nerves was followed by a spurt of blood, which revealed the laceration of the axillary artery. (Fig. 2.)

The laceration was immediately opposite the origin of the subscapular and posterior circumflex branches. After temporary

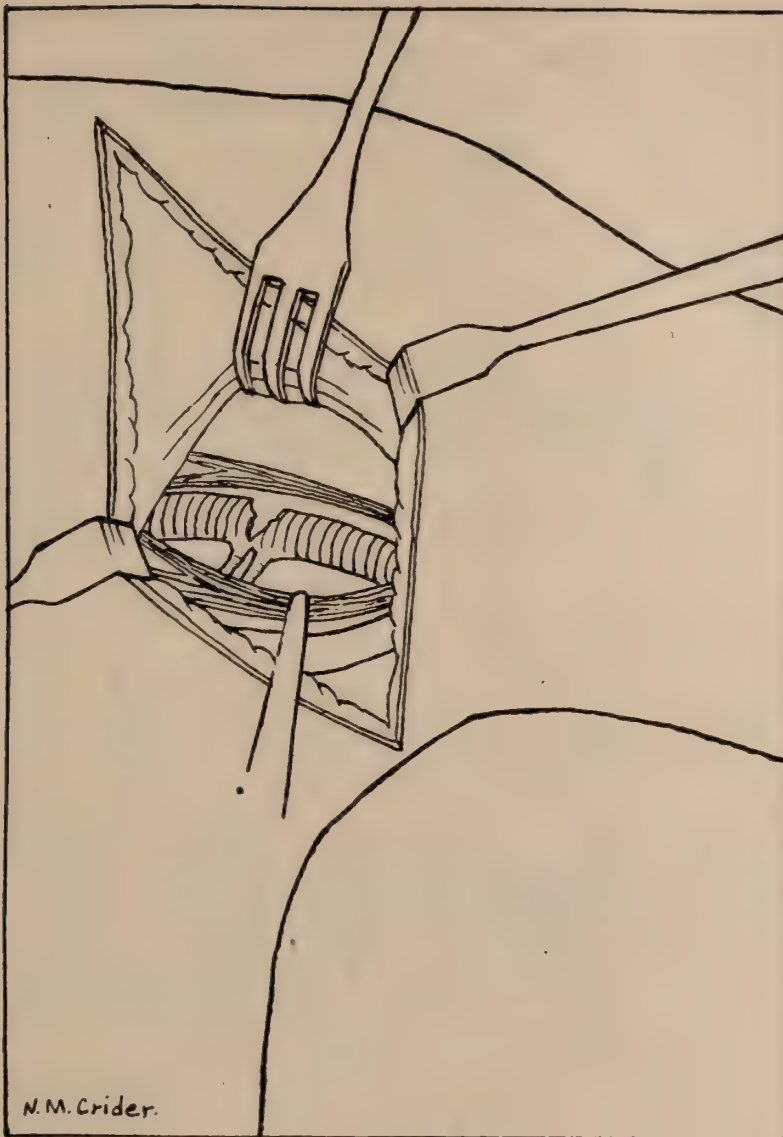


Fig. 2.

control of the main vessel, the branches were tied off (Fig. 3) and the axillary resected (Figs. 4 and 5.) The artery was found to be very atheromatous. End to end suture was accomplished

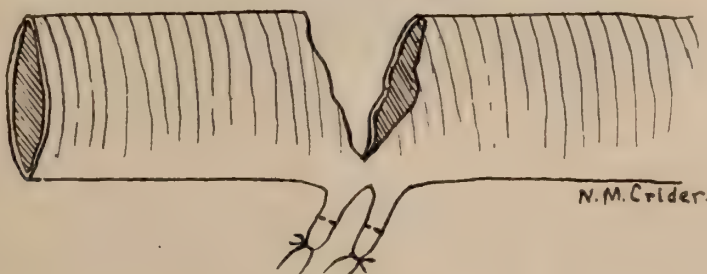


Fig. 3.

by the method of Carrel (Fig. 6) with the exception that only two guy sutures were used and interrupted stitches applied.

The patient made a satisfactory recovery, although some spasticity of the arm remains and some limitation of the shoulder movements.

The writer has collated the literature of circular arterio-arterial suture in man and finds but twenty-nine other cases recorded.

By an analysis of these thirty cases he arrives at the following conclusions:

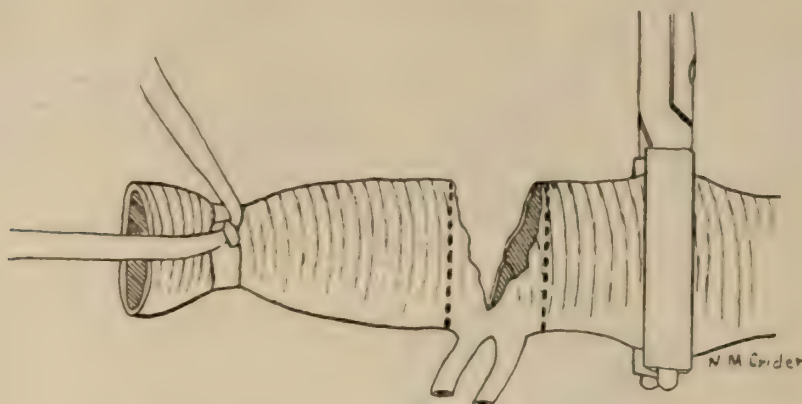


Fig. 4.

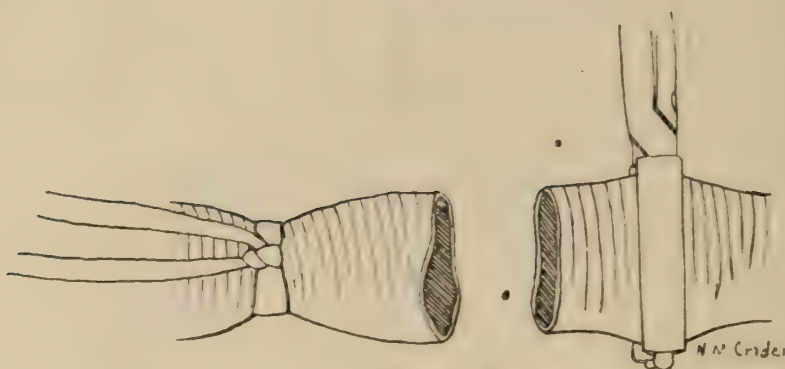


Fig. 5.

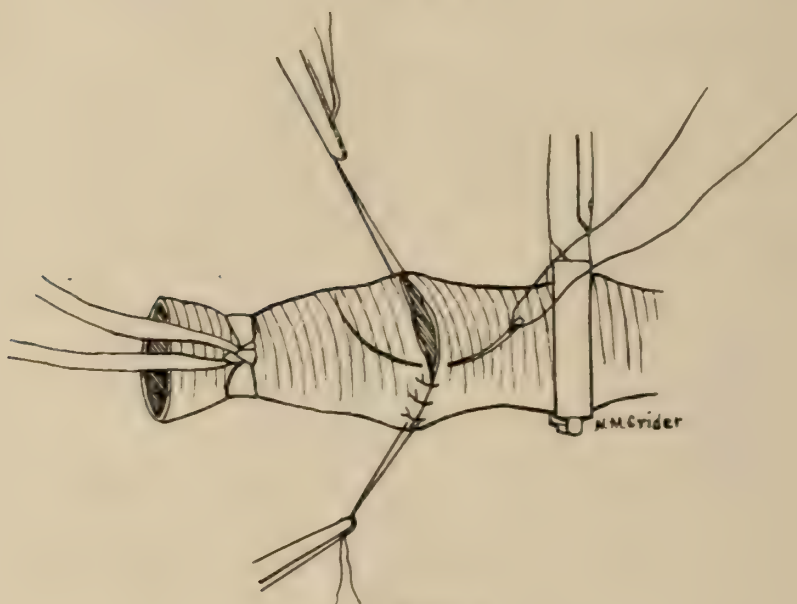


Fig. 6.

The small number of cases of circular arterial suture reported to this date can be accounted for in a variety of ways:

1. The fear of consecutive or secondary haemorrhage;
2. The expectation of weakening of the vessel with resultant aneurism;

3. The idea that the operation is difficult and requires special skill or previous animal experimentation and special instruments ;

4. The belief that thrombosis is to be expected ; which will put the procedure on a par with ligation ;

5. The opinion that atheroma contra-indicates arterial suture. This has been emphasized by numerous surgeons, notably Forgue of Montpellier, Monod and Vanverts and von Schmieden of Berlin ;

6. The fact that ligation, in a very large proportion of cases is followed by development of the collateral circulation and a result equal to arterial suture.

Taking up these points in detail, the following facts should be considered :

1. Haemorrhage has never followed circular arterial suture, and but one of the reported cases of lateral suture. This is probably due to the reason that, where perfect primary union is not secured by the accurate suture, thrombosis will promptly occur, which will sufficiently plug the vessel before the stitches could possibly give way.

2. Aneurismal dilatation has never been observed after arterial suture ; this has been shown by an extensive inquiry by Matas.

3. The operation on vessels of the size of the femoral and axillary is no more difficult than many others that the general surgeon daily performs. Animal experimentation to acquire dexterity is certainly desirable but not essential to success for the ordinary operator. Instruments required are only such as are present in every well-equipped operating room.

4. Thrombosis undoubtedly occurs after many arterial sutures ; but in the interim, the sutured vessel remains patulous and performs its function till its gradual closure by a thrombus has induced dilatation of the collateral vessels.

5. The writer's case is but one among a number which shows that no harm may result from arteriorrhaphy in vessels markedly atheromatous.

6. Gangrene occurs in a certain proportion of cases of ligation of main arterial trunks (stated by Wolf as fifteen per cent in the cases of axillary ligation) and certainly some of these unfortunate results can be saved by circular suture.

INFANT MORTALITY. In the United States almost exactly one child in eight dies within the first year. In New York City 16 per cent. die. The lowest mortality for the first year of life is in New Zealand, 68.1000.

New York City has followed the example of Buffalo in supplying free anti-typhoid vaccination, beginning January 1.

COMPLETE HEART BLOCK WITH NORMAL BUNDLE OF HIS. Wm. Pepper and J. H. Austin, *Am. Jour. Med. Sci.*, page 716, vol. 143, 1912. The case was probably syphilitic but salvarsan had no effect. There was some encroachment on the right branch of the bundle of His by fat and fibrous tissue. (Note—While the vagi were not examined and it is questionable whether the “encroachment,” without atrophy, is significant, the case is of value as indicating that the general impression that heart block is always due to a lesion of the bundle of His, is not correct).

BINET'S TESTS FOR BACKWARD CHILDREN. Siegfried Block of Brooklyn, *Am. Med.*, Nov., 1912, criticizes them and suggests some modifications. The article cannot well be abstracted, but should be read by those especially interested. The popular notion, due to rather sensational magazine articles, that persons can be accurately graded as 5, 10, 15 years old, mentally, should be corrected. Inattention, accidental ignorance on certain points or equally accidental or useless information on certain others, misunderstanding, especially by those unfamiliar with the language used, may give very misleading ratings. We have seen it stated that an adolescent or an adult should be able to remember and reproduce easily, a series of five arbitrary words. Everyday experience with Federal telephonic numbers of five figures shows that this is not the case.

SEVERE BURN OF THE EYE FROM THE CONTENTS OF A FLUID CORE GOLF BALL. W. O. Nance of Chicago (*Jour. Oph. and Oto-Laryn.*, Nov., 1912), reports the following case: Three weeks before a young man was removing the cover of a golf ball. The patient was leaning over his shoulder when suddenly a stream of so-called “acid” squirted up from the core of the ball and struck her directly in the eye. She suffered intense pain and the skin surrounding the eye was burned for a distance of one to two inches. There was a deep opacity of the cornea in almost its entire area. Vision was reduced to mere perception of light. He advised enucleation. The details of this case and the histories of others reported suggest to us as physicians the obligation we owe the public to warn them of the dangers of the fluid core ball when opened.

MALUM PERFORANS IN DIABETES. John T. Sample and W. L. Gorham, *Johns Hopkins Hosp. Bull.*, Jan., 1913. Seven cases of perforating ulcer of the toes, foot, etc., are reported. Among 687 cases of diabetes in literature, 19 showed ulcers—2.7 per cent. Gascuel, conversely, found among 91 cases of malum per-

forans, that 14 were diabetics—15 per cent. Various plausible theories are discussed with negative conclusions. In no case of diabetic malum perforans was neuritis demonstrated. The mechanic theory of pressure is confirmed by the fact that the majority of cases are in males who would be supposed to use the feet more (but not to subject them to more pressure) and by observations of cure on allowing rest. On the other hand, some cases are not thus relieved and the ulcer may occur on the hand. Endarteritis is either absent, or develops late. The toxæmic theories (lessened resistance on account of hyperglycaemia or of toxins in the stricter sense) are negatived by the fact that malum perforans does not coincide except occasionally with gangrene, carbuncles, etc., that it is recorded in only one case of severe glycosuria and that it occurs mainly in mild cases, without acetone bodies. The knee jerk is absent in about half of the cases.

CALCULUS OF APPENDIX. Dauriac and Desternes, *Bull. et Mem. de la Soc. de Med. de Paris*, October 27, 1912. The calculus removed from a youth of 19, was irregularly mulberry-shaped, yellowish, 2x1 c. m. It consisted of a homogeneous white center of carbonate and phosphate of calcium, surrounded by strata of yellowish mixtures of these salts with stercobilin. Letulle, in discussing, said that in an experience of about 600 microscopic examinations of appendices removed by operation and of about 2000 autopsies, he had found appendiceal calculus extremely rare.

FELLOWSHIP FOR WOMEN PHYSICIANS. The Mary Putnam Jacobi fellowship of \$800 is open to all women graduates, selection being made by examination of credentials and deciding as to who is most apt to prove most worthy of assistance in post-graduate studies, to be pursued in New York City. The award will be made June 1, 1913, to cover the year beginning October 1, 1913. Applications should be made to Dr. Emily Lewi, 35 Mt. Morris Park, West, New York City.

NEW YORK CLINICS. A Bureau of Information has been established at the New York Academy of Medicine, 17-21 West Forty-third street.

NO SMALLPOX EPIDEMIC AT NIAGARA FALLS. Dr. E. E. Gillick, Health Officer, denies the press report that there was to be a wholesale vaccination or that there is any need of it. He thinks the rumor may have arisen from an agent's attempt to sell the city a large supply of vaccine.

THE EXCRETION OF FORMALDEHYDE BY THE KIDNEYS OF PATIENTS TAKING UROTROPIN.—L'Esperance (*Boston Med. and Surg. Jour.*, October 24, 1912), states that formaldehyde appears in the urine in only about 52 per cent. of the patients taking urotropin, regardless of the size of the dose administered. It is of great importance that the practitioner should know whether the urotropin is having the desired effect in typhoid, infections of the bladder, etc., and for this purpose Burnam's test seems reliable. The ordinary tests are too delicate.

To be of value, urotropin must be present in one part to 5000 or 6000. The duration of excretion is four to six hours. The best intervals for testing for its presence are, one-half, one hour or an hour and a half after administration. Burnam's test:

To 10 c. c. of urine in a test tube at body temperature is added:

1. Of solution phenylhydrazine HCl, 0.5% gtts. 3.
2. Solution sodium nitroprusside, 5% gtts. 3.
3. Of a saturated solution of sodium hydrate, a few drops are poured along the side of the test tube.

Positive.—A deep purplish-black color quickly changing to a dark green; gradually to a lighter shade and finally to a pale yellow.

Negative.—A reddish color, gradually changing to a light yellow.

The reaction of the urine is of no importance and the increase of dosage does not affect the excretion of urotropin in negative urines. Also, alkalies taken with or in combination with urotropin, have no effect on the excretion.

H. REICH, Tübingen (*Zent. fur Chir.*, November 9, 1912), reports the successful transplantation of a section of the ear with its cartilage to fill the defect caused by the excision of a cancer of the left naris.

GAS BACILLUS INFECTIONS.—Walter C. Cramp, New York City (*Annals of Surgery*, October, 1912), reports 187 cases of his own and others. His net conclusions are for sweeping incisions of infected tissues with continuous application of hydrogen peroxide, frequently if not constantly renewed.

THE TECHNIC OF TUBAL STERILIZATION.—L. W. Sittig, Davenport, Iowa (*Surg., Gyn. and Obs.*, October, 1912). With an extensive reference to the literature, the author reviews the uncertainty of all methods of sterilization of the female, save the cornual excision, which has proved the most certain. This in view of the growing movement for compulsory sterilization of the hopelessly mentally deficient.

SUCCESSFUL REMOVAL OF OVER ELEVEN FEET OF SMALL INTESTINE FOR MESENTERIC THROMBOSIS.

E. R. McGuire of Buffalo, *Surgery, Gynecology and Obstetrics*, January, 1913.

No.	Operator	Amount Resected Cm.	Result	Metabolic Disturb- ances	Remarks
1	Ghedini	524	Recovery		Strangulated hernia.
2	Nigrisoli	520	Recovery	Moderate	Obstruction from adhesions.
3	Storp	510	Recovery	Moderate	Sarcoma of mesentery; recurrence, death.
4	Stolz	475	Recovery	Slight	Fatigue after exertion.
5	Axhausen	475	Recovery	Moderate	Volvulus, death 6 months later, tuberculosis.
6	Friedrich	400	Recovery		Functional short-circuit.
7	Pauchet	400	Recovery	Violent	Gangrene, hernia.
8	Mitchell	366	Recovery		
9	Werelius	365	Recovery	Slight	Abortion, rupture of uterus.
10	McGuire, E. R.	336	Recovery	Moderate	Mesenteric thrombosis.
11	Ruggi	330	Recovery		Strangulation and adhesion, 3 operations.
12	Morton	322	Recovery		Myxosarcoma of mesentery.
13	Whitall	320	Recovery	None	Abortion. Perforation of uterus.
14	Zeidler	318	Recovery		Hernia.
15	Fischer	316	Recovery		Incarcerated hernia.
16	Barth	316	Recovery	Slight	Ovarian tumor, faecal fistula, short-circuiting, later resection of short-circuited loop.
17	Ghedini	315	Recovery		Strangulated hernia. Death in 3½ month. Marasmus.
18	Fantino	310	Recovery	Moderate	Gangrene, volvulus.
19	Staehlin	305	Recovery	Slight	Strangulated hernia. Recovered perfectly.
20	Friedrich	300	Recovery		Septic peritonitis, short-circuiting without resection.
21	Gobell	300	Recovery	Slight	Mesenteric hernia and volvulus.

THE DIFFERENTIAL DIAGNOSIS BETWEEN BRAIN ABSCESS AND SINUS THROMBOSIS AND THE TREATMENT OF THESE CONDITIONS. Edward Bradford Dench (*Jour. Oph. and Oto-Laryng*, Dec., 1912), calls attention to two of the sequelæ of a suppurative process within the middle ear, brain abscess and thrombosis of the lateral sinus. Statistics compiled a number of years ago of ten thousand cases of middle ear suppuration, one patient in every 88 suffered from some intracranial complication. The importance of bearing in mind this possibility is evident. He takes up these two conditions separately and then emphasizes their points of differentiation. In brain abscess there are usually three distinct stages: (1) the stage of primary involvement; (2) the latent stage; (3) the terminal stage. When the brain substance becomes infected there is a sudden and abrupt rise in temperature, an increase in the pulse rate, and a certain amount of malaise. The temperature ranges from 101 to 103, seldom higher, and the pulse rate is proportionate. The rapid pulse is present only in the early stage. Even in acute abscess it is soon succeeded by a slow pulse, and this is one of the important signs to differentiate this condition from some of the other intracranial complications. After from two to ten days the latent stage ensues, and this may last from a few weeks to a number of years. Then follows the terminal stage in which the symptoms may be either local or general. Going more into detail there are certain signs which are indicative of intracranial inflammation no matter where located. These are headache, vomiting, muscular paralyses, and choked disc. Headache is always present in brain abscess. A persistent headache in a case of acute inflammation of the middle ear always suggests early intracranial involvement. Vomiting is present in about 50 per cent. of the cases. The muscular paralyses are usually those involving the ocular muscles, and the sixth nerve is the one most commonly affected.

Optic neuritis is a sign of considerable importance and in every suspected case the fundi should be examined.

He then describes certain localizing symptoms such as the aphasia present in involvement of the left temporosphenoidal lobe, and mirror writing, and, in cases of cerebellar involvement, disturbances of equilibrium.

He then discusses sinus thrombosis, giving an outline of the anatomy of the lateral sinus with some of its anomalies. The most characteristic symptom is a sudden elevation of temperature to 104 or 105 or even 106. This rise attains its maximum in from 2 to 6 hours and then suddenly falls either to normal or to 100 to 101. Soon a second similar rise occurs indicating a

second amount of poison thrown into the general circulation. These rises and remissions take place once or twice in the twenty-four hours. Occasionally the fever remains persistently high. The characteristic temperature alone is sufficient to enable us to make a diagnosis in the very large majority of cases. Other symptoms are characterized by their absence. These patients do not seem to be ill. The sensorium is almost always clear, and there is practically no discomfort. If the case is untreated and the thrombus extends to the internal jugular vein other symptoms appear. There may be pain in the neck, and usually, torticollis. A very important sign is enlargement of the glands along the border of the sternomastoid. It is present in the early stages and should not be overlooked. Later septic emboli may lodge in some of the viscera and give rise to special symptoms. Choked disc is not infrequent. The value of the differential blood count is problematical. A positive blood culture is of the great importance and practically clinches the diagnosis, but the absence of a positive culture does not exclude the presence of this condition. Clinical signs should always outweigh a negative blood culture.

The differential diagnosis between these two conditions ordinarily should be easy. The characteristic difference in temperature, the absence of cerebral symptoms in sinus thrombosis and their presence in abscess, the rapid pulse in sinus thrombosis and the slow rate in every stage of abscess except the early, usually make it simple. Certain cases occur in which the abscess is secondary to a sinus thrombosis. These are confusing.

As regards the treatment, operation is the only plan that offers the patient the least hope of recovery.

He discusses his operative procedures in detail. It is better to err on the side of radicalism and save the patient than to be too conservative and thereby sacrifice a life.

ON THE SURGICAL TREATMENT OF RENAL AND URETERAL CALCULI WITH REPORT OF 82 CASES.—Dr. W. P. Kouzuetzky, St. Petersburg (*Zent. fur Chir.*, November 23, 1912). The author describes a conservative method of removing stones, namely, by entering through the posterior surface of the pelvis, leaving the upper pole and anterior surface of the kidney covered with the perinephic fat. He advises separate incisions for nephrotomy should this be required, because of the size and positions of the stones. He mentions the dangers from haemorrhage, but fails to note the wire method of nephrotomy by which this danger is so largely diminished.

BUFFALO MEDICAL JOURNAL

A Monthly Review of Medicine and Surgery

EDITOR AND PUBLISHER DR. A. L. BENEDICT, 228 Summer St., corner of Elmwood Ave., Buffalo. (Address for all communications. Please make personal and telephone calls before 1 P. M.)

THE BUFFALO MEDICAL JOURNAL is the third, in age, in the western continent. It is independent but supports professional organization. As a scientific medium, it is unrestricted in territory. As a news medium, it is limited mainly to the western four districts of the Medical Society of the State of New York. The co-operation of physicians is asked in securing personal, obituary and other news items. Secretaries of Medical Societies in this region are requested to send brief reports of meetings. Full transactions will be published at cost of composition.

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MARCH, 1913

No. 8

There is something wrong about the man who could be used either as the literary type or caricature of his profession; and something equally wrong about the man whom no one could conceive as a representative of that profession.

Income Tax

Ratifications having been obtained from the requisite number of states, the United States will probably soon enact a law providing for a one per cent. tax on all incomes in excess of \$5,000. Unfortunately, this will not affect much more than five per cent. of our profession, but, with the experience of the past in mind, we suggest that the organized profession should take action to secure a fair assessment on net income, exclusive of legitimate business expenses, as for other businesses and professions. In passing, it may not be out of place to suggest also, certain general principles of taxation that ought to be made political issues, irrespective of party.

1. The total tax should not be increased without urgent cause, except in proportion to the increase of population and wealth.

2. A new tax should not supplement but replace, in whole or part, a previous method.

3. No tax should be exorbitant. A tax of 5 cents on a 2 cent Dutch cigar, and then some more for the revenue stamp on the box, is pretty near the old Roman limit of extortion from conquered tribes. A thirty per cent. income tax on real estate for the city alone, plus a six per cent. tax for the county and

state, plus transfer taxes occasionally, and then plus one per cent. on the net income if it exceeds the amount that the U. S. Government may fix, is not exactly compatible with the Fourth-of-July oratory about a free, home-owning people.

4. Multiple taxation, either in the sense of taxing two or more persons for the same property, as is uniformly practiced in regard to mortgaged property; or in the sense of taxing the same person several times over on the same property, as illustrated above, should not be allowed.

The Friedmann Anti-Tuberculosis Serum

Our readers have been informed as to the pros and cons of this subject through the daily press. We defer any expression of opinion as to its merits for a couple of years at least. With a natural scepticism due to past experience in many failures of analogous cures, certain diagnostic signs, etc., we confess to a general optimism. Some time, some one, somehow, will show us how to eradicate tuberculosis. It may be by the patient application of a number of prophylactic and hygienic measures or by some one brilliant method of therapeutics or specific prophylaxis. Perhaps the tubercular millenium has been reached, perhaps not.

But we want to draw a moral, apropos of the agitation regarding animal experimentation, and of the present tendency to establish institutions of research along all scientific lines. It should be recognized that men of heterodox opinions, apparently lacking in preliminary qualifications, and hopelessly lacking in influence, have in spite of—or perhaps because of—these circumstances, contributed much to science, medical and general. Absolutely nothing in the way of restrictive legislation or of a closed door policy, should be tolerated to the discouragement of the independent worker.

And, at some risk of being misunderstood, to imply more than is intended, we wish to say just a word as to the condemnation of Dr. Friedmann on the ground of commercializing his discovery. There is a very ancient rule of ethics, on good authority, to the effect that the Laborer is worthy of his hire. Always provided that one is sincere and honorable, valuable labor is worth high wages. With these qualifications, we can see no more objection to taking advantage of a notable discovery than of social and professional standing, to charge an unusually high fee. And, while the man who merely increases his schedule of charges for routine work because of social and professional prestige chiefly benefits himself and tends to shorten his period of active usefulness by the ability to retire early, the man who has made a great discovery increases his efficiency to humanity

by making himself independent of sordid cares and distractions. These remarks do not, however, apply to the man who simply grasps at the opportunity afforded by a temporary and fictitious notoriety.

Dr. Hesse of Berlin will contribute a report on this subject in our next issue.

Editorial Announcements

ARTICLE BY OUR ASSOCIATE EDITOR FOR GERMANY. Dr. C. A. Ewald has contributed a valuable article on Parenchymatous Gastric Haemorrhages, which has already been translated and will be published in the April or May issue.

LACK OF CREDIT FOR NEWS ITEMS. It has been found impracticable to give credit for news items of various kinds, especially as these are often found in newspapers and exchanges which have obviously obtained them from other sources. We wish, however, to express our indebtedness to the *Journal of the A. M. A.* for a large minority of obituary items, chiefly of physicians formerly but not at present residents of Western New York, and to state that the *Boston Med. and Surg. Journal* is especially active in collecting notes of longevity, etc. Items regarding professional societies are also, to a large degree, contributed by the secretaries. We feel free to appropriate news items from any available source and do not expect credit to this Journal for any similar item nor for abstracts, which should be designated according to the original source.

Date of Publication of Matter Received

A guest at a Thanksgiving dinner remarked to an author: "I suppose you are at work on a Christmas story now." "Well, scarcely," replied the author, "my Christmas stories were all sent in last spring and I am getting out a Fourth of July story now and am late at that." To prevent misunderstanding, the following obvious statements are published: The original articles for the JOURNAL are usually arranged three or four months in advance, though it is occasionally possible to publish a timely or perishable article received in the first few days of a month, in the next month's issue. Brief letters, news items, etc., can usually be published in the forthcoming issue if received by the fifteenth of the month. All matter is sent to the printer by the twentieth; in fact he usually has ten to twenty pages excess which is left in type for the second month after the current one; very brief personals, obituaries, and notes of special and immediate interest may be added as late as the twenty-fifth.

crowding out Abstracts, New Inventions, Book Reviews, etc., to make space.

A Thoughtful Act From Which Our Readers Derive Benefit

We guarantee an average of sixty reading pages a month, 720 a year, and, as will be noted, we are exceeding the guarantee. The standard of the JOURNAL has been increased from fifty-eight pages of reading and twenty-six of advertising to sixty of reading and thirty-six of advertising, in the last year and a half. This does not afford quite space enough for "reading notices" (which, you may have noted, are no longer inserted in the reading pages so-called, although they are worth reading), so that an extra form has to be added every few issues. Most of the extra form is used in the body of the JOURNAL. With this preamble, we will state that, in January one of our subscribers very kindly mentioned the JOURNAL as an advertising medium. A small, single-insertion advertisement was thus secured which paid for a couple of pages of good reading matter. Similar thoughtfulness will enable us to increase the size of the JOURNAL or to improve the quality, and, when the advertising section can be brought up to fifty pages, to reduce the subscription rate materially.

Addition to Staff

Dr. J. George Adami of Montreal, who joins the Foreign Staff of the JOURNAL, is too well known by his work in pathology and has too many personal friends among us, to require an introduction. We extend to him a cordial welcome. The delay in having Canada represented on our staff has been due to the fact that it was only recently that it occurred to us that Canada was a foreign country. It is said that there are more Yankees in proportion to the population in Ontario, between the two lakes, than in any part of the United States, not to mention the fact that the earlier settlers were of essentially the same blood as the Yankees.

TOPICS OF PUBLIC INTEREST.

PURE FOOD. 196 of 200 women students at a pure food banquet at the University of Chicago, February 6, suffered from ptomaine poisoning. (Note—This is a suspiciously high percentage for bacterial infection and suggests some irritant vegetable cathartic active principle.)

SMALL BABY. Mrs. Paul de Meures of Philadelphia gave birth to twins about the first of the year, weighing respectively 1 and

4½ pounds. The larger one died. The smaller, after 47 days, weighed 1¼ pounds, measured 14½ inches and was apparently healthy.

THE CONSOLIDATION is announced of the Medical College of Virginia and the University College of Medicine of Richmond.

THE ROCHESTER GENERAL HOSPITAL treated 1015 ward and 1019 private patients in 1912. 247 children were born in the hospital.

THE ROCHESTER HOMOEOPATHIC HOSPITAL treated 2128 full-paying patients, 97 part-paying and 536 free patients in 1912.

THERE ARE TWO PHYSICIANS IN U. S. SENATE: Gallinger of Vermont, a homoeopath who has not practiced for many years and who is considered an anti-vivisectionist and anti-vaccinationist; Harry Lane, newly elected from Oregon, a regular, in active practice up to the present and supposed to favor animal experimentation, vaccination, etc.

THE McCLELLAND ANTI-VIVISECTION BILL was killed in N. Y. Senate Committee by a vote of 6-4. Such bills are introduced annually and we repeat our warning that, if the profession continues to oppose investigation and legislation on this subject, a drastic bill may be expected to pass sometime. This does not imply that our policy is that of an anti. On the contrary, we hold that not only institutions but individuals, properly qualified, whether possessing the degree of medicine or not, should be allowed to experiment on animals subject only to such reasonable supervision and restriction as is applied to other matters on which public opinion demands legislation.

DR. DANIEL G. CAREY of Elmira was indicted for manslaughter January 29, death being due to an abortion. Dr. Carey is not listed in the State Directory but is in Polk's Directory, having graduated from the Eclectic Medical College of Pennsylvania, in Philadelphia, in 1870. This school has been extinct since 1880.

U. S. PUBLIC HEALTH SERVICE: EXAMINATION OF CANDIDATES FOR ASSISTANT SURGEON. Examinations will be held in Washington, April 7. Application for blanks should be made immediately to the Surgeon-General. The initial salary is \$2,000, with quarters, successive promotions increasing the salary to the equivalent of \$6,000 toward the close of one's life. This

is, in our opinion, the most pleasant and most desirable from the standpoint of professional ambition, of all the government services.

TORONTO had 130 cases of typhoid with 25 deaths in 1902; in 1903, 156 cases, 35 deaths; in 1904, 133 cases, 41 deaths; in 1905, 197 cases, 45 deaths; in 1906, 259 cases, 63 deaths; in 1907, 186 cases, 58 deaths; in 1908, 201 cases, 60 deaths; in 1909, 331 cases, 77 deaths; in 1910, 739 cases, 151 deaths; in 1911, 520 cases, 81 deaths; to December 26th in 1912, 276 cases, 54 deaths. Note—As the average mortality of typhoid is about 10 per cent, it is evident that many non-fatal cases were not reported.

SMALLPOX IN QUEBEC. To December 20th, 1912, there were 971 cases of small pox in the Province of Quebec for the six months as follows: July, 106 cases; August, 103; September, 63; October, 119; November, 495; December, 84.

According to Dr. Elzear Pelletier, the Secretary of the Quebec Board of Health, these figures are only a small percentage of the cases, as many municipalities refuse to report their cases of contagious diseases.

TUBERCULOSIS AND TELEPHONES. *Dominion Medical Monthly*, January, 1913. So far as is definitely known the tubercle bacillus has been recovered from a telephone swab but once. Prof. Klein found this in 1908 after examining a number of transmitters. In 1905 he had undertaken to conduct these investigations, but failed to find either the tuberculosis or diphtheria bacillus. Spirta recently confirmed these investigations, and although his experiments extended over a year, he did not recover the tubercle bacillus in one instance. Some instruments used were in a hospital for consumptives by patients actually suffering from the disease. Spirta concludes "that the transmission of tuberculosis through the medium of the telephone mouthpiece is practically impossible."

THE DEROALES PRIZE. A gold medal is offered by the American Laryngological Association for the best essay upon some subject relating to laryngology and rhinology by any practitioner in regular standing in the United States or Canada. The essays must be typewritten in English and be accompanied by a sealed envelope containing the author's name and the title of the paper. They must be sent to the secretary, Dr. Harmon Smith, 44 West Forty-ninth street, New York, before May 1, 1913.

STREET AREA. For an average American city, with ordinary streets 50-60 feet wide (average for Buffalo 55), a few main

thoroughfares 100 feet (99 for Main street, 100 for Richmond and Porter) and parkways of 200 feet with double driveways and grass plots, 20-30 per cent. of the total area is devoted to highways. The newer cities, with ideally wide streets may devote 40 per cent. to this purpose.

NOTIFICATION OF VENEREAL DISEASE. The N. Y. City Health Department has ordered superintendents of institutions and has requested private practitioners to give notification of all cases of venereal disease with the source of infection, if possible. The Medical Association of Greater New York City has adopted resolutions condemning this action, the assertion being made that the Health Department contemplates the establishment of free dispensaries for treating cases and has been prevented only by the failure to secure an appropriation of \$50,000. The opposition is based both on the possible infringement on private practice and on the general principle of privileged communications by patients.

DISCONTINUANCE OF FREE ANTITOXIN. The N. Y. City Health Department has discontinued the practice of supplying free anti-toxin for diphtheria, after eighteen years of this policy. The general adoption of this method is given as the reason. Provision will still be made for indigent cases.

ASSISTANT IN EXPERIMENTAL THERAPEUTICS, Phillippine Service, salary \$2,000. Applicants must be males, with the degree of M. D. and must have had at least one year's experience in post graduate research work or its equivalent. The further requirement that they must have reached their eighteenth year seems superfluous. Choice is made on examination of credentials submitted. Apply to U. S. Civil Service Commission, Washington, D. C., for Form B. I. A. 2, before March 10. (Note—It strikes us that selection by examination of credentials, with public notice sent to monthly journals which appear about five days, on the average, before the papers must be at the office of the Civil Service Commission, is something like Hamlet with Hamlet left out.)

MEASLES IN JAMESTOWN, N. Y., 1100 cases were reported up to February 14, with seven deaths. It is worth remembering that while the direct proportionate mortality of measles is not very high, the marked prevalence of the disease and the predisposition which it leaves for tuberculosis, renders it one of the most important unsolved problems in medicine.

PUMPAGE OF WATER IN THE TONAWANDAS. Tonawanda pumped over five million gallons of water a day during January, there being only one fire. 143 tons of coal were used. North Tonawanda pumped nearly 169 million gallons for the same month. Nearly 8 millions a day were pumped during the very cold weather and, at the time of the fire in the Goundry Street School, the pressure could not be raised above fifty pounds. The problem of water supply to keep pipes from freezing is a serious one. Yet, we hold that it is not only human nature but sound economy to allow the waste (?) of a few cents worth of water to prevent a plumbing bill of several dollars and a general insistence on non-freezing plumbing—if such a thing is possible at all—must mean a great increase in the cost of living, both on account of the additional capital invested in plumbing and general construction of houses, and on account of fuel. We do not see how the rent—or the up-keep of a privately owned residence—can be kept within five dollars a month of its present average or how cheap, separate homes with yards can be maintained against the gradual encroachment of apartment buildings, unless water departments generally recognize the incontestable fact that still water will freeze in pipes when the temperature falls below zero centigrade; and the principle of economics that it is no more waste to use a few gallons of water to save two hundred dollars' worth of plumbing, than a quart to wash a penny tumbler.

CENTENNARIANS.—The following cases of persons who have reached ages about 100 have been gathered from various sources:

Mrs. Mary Stockham, died October 1, 1912, at Stogurzy, Eng., born August 24, 1812.

Lucy Frey, negress, born a slave June 20, 1790, is still at work as a laundress in Culpepper County, Va.

Mrs. Mary Ann Foley of Denver, born in Ireland 111 years ago, is surprised at being sick for the first time in her life.

Mrs. Elizabeth Thompson, negress, died early in December, 1912, in Patterson, N. J., said to be 115 years old. Her husband lived to be 109. Twenty-one of her twenty-two children and fifty grandchildren survive.

Carsamine Paige, said to have been the oldest newsboy in the world, died at Joliet, Ill., January 2, 1913, aged 105.

Mrs. Maggie Adams, an Indian, died recently at Garibaldi, near Bay City, Ore., at the reputed age of 113.

Joseph Harshi, a carpenter, born in Germany in 1802, came to America at the age of 40, ceased using alcoholic beverages at 80 and tobacco at 105. He died in Chicago, October 21, 1912, aged 110. He is survived by five sons, seventeen grandchildren and five great-grandchildren.

Garret Abers, of Salamanca, was born April 3, 1813, served through the Civil War and is still in good health.

Mrs. Mary Besant, born August 8, 1811, died at Clevedon, Somersetshire, Eng., November 25, 1912.

Charles Cauley, born in Ireland in 1803, died December 25, 1912, at Copper, Tex., and was engaged in active work as a farmer until two months previously.

Mrs. Mary Nideau, born April, 1808, thrice married, died December 19, 1912, at Hampden, Me. She was in vigorous health till shortly before death. She had no living descendents.

A Georgia man, 106 years old, has been sentenced to the chain gang. Anthropologists will regard the incident as corroborative of the adage that the good die young.

Mrs. Mary Ann Peterson, born in New London, Conn., August 22, 1807, died in the same place December 29, 1912.

Mrs. Currance Gould, widow of Dr. Wm. Gould, died in Buffalo January 26, 1913, aged 97.

Wm. J. Ray, one week over 107 years old, was fined for his sixth offense in selling liquor illegally, in Hartford, Conn., January 27, 1913.

Mrs. Samantha Nellis of Naples, N. Y., celebrated her 103d birthday in January, 1913. She is still in good health, though slightly deaf. Her father, Elijah Stanton, was born at Preston, Conn., in 1754, and served in the Revolution.

Mrs. Ann Lacy of Ramsgate, Eng., born December 29, 1812, received congratulations from the king on her hundredth birthday.

M. T. Kreppa, said to be the oldest Odd Fellow in the world, died at Washington, January 30, 1913, aged 95.

Mrs. Marcelina Elisalda, a widow, aged 105, recently married a man of 80 at Los Angeles, but died a few days later.

Mrs. Mary Moore Merrill, Jamestown's (N. Y.) oldest resident, celebrated her 98th birthday January 31, 1913. She is in good health and active.

Mrs. Daniel Swinford, who died on January 3, at Minster, Isle of Thanet, England, was locally reputed to be 100 years of age.

Mrs. Moore of Plymouth, Devonshire, is said to have been born on January 20, 1811.

Mary Fehily, who died on January 5 at Middleton, East Cork, Ireland, was alleged to be 104 years old. She had for many years practised the habit of smoking tobacco.

Wah-Hah-Gun-Ta, a Blackfoot Indian chief at the Glacier Reservation, who is known to have visited Thomas Jefferson while the latter was president, is reported to have been born in 1781. He is said to preserve still an active and vigorous physical health.

James Thomas, who died last week at Monett, Mo., is said to have been born in 1807.

Sarah Ann Byles, a negress, who died on January 29 at Frederick, Md., was locally reputed to have been born in 1798.

LACK OF APPRECIATION OF FRANCHISE. About fourteen million votes were cast at the latest presidential election. Approximately 30 per cent. of a total population should normally consist of males over 21. With allowance for increase in population for the two years since the latest census, there were about twenty-eight million males of voting age and about fourteen hundred thousand women of voting age in the six states having the franchise. In other words, the presidential election which normally calls out the highest vote, was participated in by less than half of those theoretically eligible. About three million (nearly half of the foreign born) were not naturalized and allowance must be made for sickness, absence, removal within the varying period of residence required by different states and election districts, conviction of crime and other causes. But, at the best, there is a surprisingly large number of men who do not appreciate the franchise and this implies a sociologic problem close enough to professional interests to warrant its being mentioned here. The following statistics which must, on the average be increased by nearly 4 per cent. to correspond to the natural increase of population between June, 1910, and November, 1912, are furnished by the courtesy of the Bureau of the Census:

MALES OF VOTING AGE, 1910.

UNITED STATES, EXCLUSIVE OF OUTLYING POSSESSIONS.

Native white—	TOTAL, 26,999,151.
Native parentage	13,211,731
Foreign or mixed parentage.....	4,498,966
Foreign-born white	6,646,606
Naturalized	3,035,333
First papers taken out	570,588
Alien	2,265,121
Unknown	775,564
Negro	2,459,327
*All others	182,521

FEMALES OF VOTING AGE.

NATIVE WHITE.

Tl. for 6 States

Total females 21 and over.....	1,346,925
Native Parentage	654,784
Foreign or mixed parentage.....	333,925
Foreign born white	327,682
Negro	13,488
*All others	17,046

Six States—California, Colorado, Idaho, Utah, Washington and Wyoming.

*Includes Indians, and Chinese, Japanese and other Asiatics.

35TH ANNUAL REPORT OF THE CHARITY ORGANIZATION SOCIETY OF BUFFALO. The city out-door relief has decreased from \$112,053 in 1876 to \$43,860. 1.5 per cent. of the population is aided by the Society and the Poor Master instead of 10 per cent. Only about a third of applicants for assistance require financial aid, the rest need legal advice, institutional care, medical treatment and guidance. Lack of employment is a minor factor. 80 per cent. of the aid is due to partial or complete disability and sickness and, of the sickness, only about a third is due to lust and intemperance. About twenty years ago the reviewer was in rather close touch with certain phases of relief work, and, at a rough estimate, two-thirds of the poverty was due to shiftlessness, comparatively little to alcohol. Almost never was a really deserving case encountered, except in the sense that women and children might require aid on account of the delinquency of the nominal supporter of the family. Not to be unfair to the men, it should also be stated that many cases of acute poverty were the fault of wives and children. It is only fair to state that institutional charity, philanthropic organizations, etc., which are supported on a magnificent scale of generosity as compared with conditions thirty-five years ago, account for a large share of the apparant diminution of charity. Thanks to the late J. N. Adam, the Society will soon move into new quarters at 181-185 Franklin street, and will have room for various other philanthropic societies. Not only will the new quarters expedite the good work of the Society, but, as the site is rapidly increasing in value for business, it is probable that, within a few years, the Society can again move to equally convenient quarters and with a considerable capital.

DOCTOR WANTED—At Viola, Delaware. There is a good opening for a physician in this town. Inquire of Henry De Blois.

SOCIETY MEETINGS

THE BUFFALO ACADEMY OF MEDICINE gave a dinner to Dr. Ramon Guiteras of New York, February 5, at the Statler. At the meeting which followed, Dr. Guiteras gave a lantern demonstration of prostatic work, of which he has promised a full abstract for publication in the BUFFALO MEDICAL JOURNAL. Dr. Nelson W. Wilson gave a paper on "Conservatism in Prostatic Operations."

A SOCIETY FOR THE ADVANCEMENT OF CLINICAL STUDY has been organized in N. Y. City, to furnish information to resident and visiting physicians regarding clinics, etc. A bureau has

been established at the Academy of Medicine, 19 W. 43d St., with a clerk on duty from 9 to 6 to answer telephone calls (Bryant 974.) A bulletin board for announcement of standing clinics and special operations scheduled for each day has also been provided. The BUFFALO MEDICAL JOURNAL will publish announcements from time to time and, if such announcements are not regularly printed, will keep them on file for reference. Inquiry should be made of the editor before 1 P. M.

THE INTERNATIONAL CONGRESS OF OPHTHALMOLOGY will meet in St. Petersburg August 10-15 (July 28- August 2, O. S. still in use in Russia) 1914 (not 1913). Inscription fee 25 francs (about \$5.00) for members and 10 francs for members of their families. Cards will be issued which will secure admission to museums, reduced railroad fares and other privileges. Prof. L. G. Bellarminoff is President of the Central Bureau and of the International Organization Committee. For further information, registration, etc., address Dr. Th. Germann, Secretary, Ophthalmic Hospital, St. Petersburg, Mochowaja 38.

THE SECOND INTERNATIONAL CONGRESS OF LIFE SAVING AND PREVENTION OF ACCIDENTS will meet in Vienna, September 9-13, 1913. Membership fee 25 Kronen (\$5.00); fee for members of family 15 Kronen (\$3.00). Money orders should be sent to the Treasurer, Herr kaiserlicher Rat, Johann Thomas Wancura, Chef des Bankhauses Schelhammer & Schattera Stefanplatz 11, Vienna.

THE CHICAGO MEDICAL SOCIETY gave a banquet in honor of its ex-Presidents, at the Hotel Sherman, February 12. All twenty of the living ex-presidents were scheduled for speeches.

THE HOMOEOPATHIC MEDICAL SOCIETY OF THE STATE OF NEW YORK held its annual meeting in Albany early in February. Officers were elected as follows: President, B. W. Sherwood of Syracuse; Secretary, Bert B. Clark of N. Y.; Treasurer, Reeve B. Howland of Elmira; Necrologist, John L. Moffatt of Ithaca. The society endorsed Dr. Eugene H. Porter for reappointment as State Commissioner of Health.

THE BUFFALO ACADEMY OF MEDICINE, Section of Pathology, met February 25, after a subscription dinner to Dr. Frederic L. Sondern of N. Y., who presented "The Value of Blood Examinations in Acute Inflammatory Lesions. Dr. John Eckel gave a paper on "Serum Reactions in Diseases of the Nervous System."

The regular meeting of the MEDICAL SOCIETY OF THE COUNTY OF ERIE was held on Monday, February 17th, 1913, and was called to order by President Whitwell at 9 P. M.

Minutes of the annual meeting and those of the Council meetings were read and approved.

Dr. F. Park Lewis, Chairman Committee on Legislation, outlined a model bill drawn by the Legislative Committee of the American Medical Association, which will be presented to the Association at its next meeting, and, if adopted, will be submitted to the various State legislatures. This bill has for its object the prevention of blindness by dealing with ophthalmia neonatorum. He also submitted the bill now before the New York State Legislature, requiring medical certificates before marriage licenses are issued. This bill was approved by the Council and confirmed by the Society by adopting the Council's minutes.

Dr. Lewis gave the history of a child, born with perfect eyes, but which became totally blind from ophthalmia neonatorum.

The question was discussed by Dr. Hopkins, who thought the committee did not go far enough. Dr. Woodruff thought education was preferable to legislation. Dr. VanPeyma said that other germs than the gonococcus caused ophthalmia. Dr. Lewis explained that from thirty to forty per cent. of cases of ophthalmia neonatorum are not due to gonococcus and considered it wise not to go into that phase by legislation, as it would cast a stigma on the child's parentage and make reporting of ophthalmia difficult.

The following were elected to membership:

Dr. Paul H. Sandresky, Dr. Herman F. May, Dr. Elmer A. D. Clarke, Dr. E. A. Southall and Dr. A. C. Callahan, the two latter having overlooked the payment of their annual dues, made good and were reinstated.

Dr. Clayton Greene, Secretary of the County Milk Commission, made a verbal report on the work accomplished.

The scientific program consisted of a paper on "A Case of Spastic Paraplegia; results of section of the posterior roots of the spinal cord for the pain and spasticity," by Dr. Prescott Le Breton; "Differential Diagnosis of Dysuria," by Dr. Charles W. Bethune.

FRANKLIN C. GRAM, Secretary.

The regular meeting of the ROCHESTER PATHOLOGICAL SOCIETY was held February 20. The program included a demonstration of the Pulmotor by Dr. Walter A. Callahan and a paper on "Multiple Neuritis" by Dr. Edward B. Angell.

THE TOMPKINS COUNTY MEDICAL SOCIETY held its eighth annual banquet February 25. Dr. Robert T. Morris of New York was the principal guest of honor and gave a paper on "Instances of Colon Bacillus Infection." Rev. Nathaniel Schmidt of Ithaca spoke on "Old Babylonian and Egyptian Medicine."

This County Society was founded in 1818 and continued until 1844, when it disbanded. It was reorganized in 1862 and continued to 1900. A County Association was formed in 1903 and continued to 1906, when its members and the members of the defunct County Society joined forces in a reunited society.

The annual banquet has become a permanent feature for February, as has the joint outing with our adjoining Cortland County Medical Society, for May.

THE HOSPITAL MEDICAL SOCIETY of Rochester met February 13. Dr. H. L. Prince read a paper, "Congenital Dislocation of the Hip."

Section II.—(Surgery, including Anatomy, Orthopedic Surgery, Ophthalmology, Otology, Larynology, Dermatology and Genito-Urinary Surgery) of the ROCHESTER ACADEMY OF MEDICINE met at the Academy Rooms, February 12. A paper, "An Adventure in Practice," was given by Dr. J. G. Mumford, Clifton Springs Sanitarium. A subscription dinner was given to Dr. J. G. Mumford at the Rochester Club.

Dr. Fred A. Mendlein was the essayist of the February meeting of the MEDICAL AND SURGICAL LEAGUE of Buffalo. A very excellent paper was read by him entitled, "Some Points in the Etiology and Diagnosis of Dyspepsia."

Program for ELMIRA ACADEMY OF MEDICINE for March 5th: "Benefits to be Derived from Medical Inspection of Schools," Dr. G. M. Case; "Pruritis Ani," Dr. A. H. Baker.

OUR CONTEMPORARIES.

Dr. Paul M. Pilcher, who has edited the *Long Island Medical Journal* during the first six years of its existence, retires to the associate staff. The February issue appears under the editorial control of Dr. Henry Goodwin Webster, to whom we wish the same degree of success that has attended Dr. Pilcher's administration.

Dr. R. B. H. Gradwohl, Editor of the *General Practitioner*, published in the February issue an interesting article on Laboratory Equipment, and completes the publication of a translation of Rudolph Allers' article on the Value and Significance of Recent Advances in Immunity, in the Practice of Psychiatry. The original appeared in the *Zeitschrift für Chemotherapie*, No. 10 and 11, 1912. The bibliography alone occupies eleven pages.

PERSONALS.

Drs. Nelson W. Wilson and Edgar R. McGuire of Buffalo have been appointed to investigate the sanity of Edward Grim-mell, the trephined burglar.

Dr. A. Crandall Way of Perry is taking the Panama trip. He has recently been adopted into the Seneca Tribe with the name of Gan-aja-wah, Big Kettle of the Beaver Clan. Ha-on-yu, also a Seneca, alias A. L. B., presents his congratulations.

Dr. T. G. Hogan of Lockport has been appointed jail physician of Niagara County at a salary of \$240 a year. He succeeds Dr. Harry L. Parker.

Dr. R. S. Loop of Elmira has just returned from a sixteen days' trip to Panama and Cuba.

Dr. Henry Flood of Elmira has just returned from a two weeks' visit at Miami, Florida.

Dr. A. W. Booth of Elmira has left for a four weeks' trip to Panama, Cuba and Central America.

Dr. C. T. Crance of N. Tonawanda has returned from a week's trip to New York.

On January 25, Dr. Roland Meisenbach of Buffalo held a clinic in Toronto, by invitation. His topic was "Abbott's New and Rapid Method of Correcting the Fixed Types of Lateral Curvature of the Spine."

The honorary degree of D. C. L. has been conferred by Durham University on Sir William Osler, M. D., LL.D., Regius Professor of Medicine at Oxford University.

Dr. W. W. Britt of N. Tonawanda addressed the Shakespeare Club of his city on Scientific Achievement, February 3.

An organization meeting of the Y. W. C. A. was held at the office of Dr. Harris of Tonawanda, February 5.

Dr. Edward W. Roos of Corning visited his former home in Buffalo early in February.

Dr. S. Kavinoky has returned to Buffalo after spending a year in Berlin.

Dr. Regina Flood Keyes of Buffalo has returned from a trip around the world.

D. H. Squire, D. D. S., Dean of the Dental Department, University of Buffalo, has been elected President of the Institute of Dental Paedagogics.

Dr. G. H. Hitzel of Buffalo has been re-elected President of the German-American Alliance.

Dr. Wm. L. Allen of North Tonawanda has been critically ill.

Dr. H. H. Glosser returned to Buffalo from a trip to North Carolina, early in February.

Dr. Herman E. Hayd of Buffalo is taking a month's trip to the West Indies, Isthmus and South America.

Sir George Turner, M. D., of England, became a martyr to science and humanity, while serving in the Leprosy Hospital in Pretoria, and has retired to his home in Devonshire, awaiting the end of this infection. It is just as well to remember cases of this sort and the noble work of others, more fortunate, or not engaged in hazardous research, in discussing the "effete aristocracy of Europe."

Dr. Jacob Goldberg of Buffalo has been elected chairman of the Board of School Examiners.

Captain Roswell Park, M. D., of Buffalo, of the Medical Reserve Corps, U. S. A., has recently delivered a course of lectures at the Army Medical School at Washington.

Dr. Lucien Howe of Buffalo will return shortly from a month's trip to Panama.

Dr. Richard J. Pearson of Buffalo will return from a cruise to Porto Rico about the middle of March.

A. F. Isham, D. D. S., has been elected President of the Dental Alumni of the University of Buffalo.

Dr. J. F. MacPherson of Buffalo was operated on for appendicitis at the Johns Hopkins Hospital, February 12, by Dr. M. T. Phinney.

Dr. W. B. Cochrane of Rochester has moved from 597 East Avenue to 1293 Park Avenue.

Dr. Louis Hengerer of New York, formerly of Buffalo, visited in Buffalo last month.

Dr. and Mrs. Pemberton Lundy of N. Tonawanda were injured in an automobile collision with a street car February 4. We are glad to state that the automobile was the most seriously damaged, and that Dr. and Mrs. Lundy escaped with slight injuries.

Dr. George W. Gregg of Canandaigua recently visited his summer cottage on the lake and found that several guns and other property had been stolen.

A satchel of instruments, belonging to Dr. N. E. Kavinoky of Buffalo, was stolen from his auto at the corner of Main and Mohawk streets, February 16. (Note—We print these announcements, without request, because a similar item resulted in the restoration of property, some months ago and some months after the announcement was made.)

Dr. Burt C. Johnson of Buffalo sailed for Panama March 1.

Dr. Frank H. Ransom of Buffalo will move to 880 W. Ferry street, May 1.

Dr. Hyatt Regester of Buffalo has purchased the large, modern house at 615 Elmwood avenue, which he will use as his office and home.

Dr. G. H. Sherman of Detroit returned early in February, from a five weeks' trip to Germany and England.

Dr. W. S. Grimes of Detroit has moved his office to the new Broadway Market Building.

OBITUARIES.

Dr. John B. L'Hommedieu, N. Y. University, 1890, of Rosebank, Borough of Richmond, died suddenly February 21, aged 47. He was born in Medina.

Dr. Louis B. Pfandhoefer, University of Buffalo, 1886, died at Falls City, Oregon, January 9, aged 60. His death was due to pneumonia.

Miss Frances Black, formerly Superintendent of the Buffalo Homoeopathic Hospital, late Superintendent of the Flower Hospital, New York, died of pneumonia February 17.

Dr. Henry Woodward Jones, Detroit Medical College, 1874, died at his home in White Plains, N. Y., January 14, of diabetes, aged 65.

Dr. Colwell D. Hale, Cleveland University, 1877, one of the founders of the Syracuse Homoeopathic Hospital, died in Syracuse January 21, of cerebral haemorrhage, aged 71.

Dr. Coleman Nathaniel Clark, Buffalo, 1865, died of influenza at his home in St. Charles, Minn., January 30, aged 73.

Rev. George W. Taylor, M. D., died at his home in Princeton, Ill., January 26, aged 97, of senile debility. He graduated in medicine in 1853, from the Syracuse Medical College, an eclectic institution, organized in 1850 and extinct since 1857. Dr. Taylor retired from medical practice many years ago and became a minister of the Christian Church.

Dr. Roger W. Miller, Bellevue, 1870, died suddenly at his home in Castile, N. Y., February 22.

Dr. Theodore P. Knapp, Hahnemann of Philadelphia, 1854, died at his home in Union, Broome County, N. Y., September 25, 1912. He had been in practice in Union since 1859.

CORRESPONDENCE.

Diabetes Mellitus

I am undertaking an exhaustive research into the pathology, etiology and dieto-therapy of Diabetes Mellitus. I am very anxious to hear from every physician in the United States who

has a case under treatment, or who has had any experience in the treatment of this malady. Von Noorden says "the best treatment for the diabetic is the *food* containing the *greatest* amount of *starch* which the patient can bear without harm." If any physician who reads this has similar or contrary experience, and would take the trouble to write me, I would esteem it a special privilege to hear from him, if only a postal card.

Kindly address

WILLIAM E. FITCH, M. D.,
Room 1002, 1600 Broadway,
New York City.

The Shakespeare Myth

* Sir Edwin Durning Lawrence incloses the following extract from the Argument of Tragi-comedy of Octavia, done by Samuel Brandon in 1598, to show how firmly Bacon had established the English language at that time, and how little change has since occurred. "After the death of Julius Caesar and the overthrow of Brutus and Cassius, the chief conspirators, the Government of the Roman Empire remained unto Octavius Caesar, Marke Anthony, and (at that time) Sextus Pompeius, Marke Anthony, to confirm an inviolable league of amitie, between Caesar and himselfe, tooke to wife Octavia, the sister of Caesar. . Anthony and Caesar, falling at debate, met at Tarentum with their armies, and had bin the cause of much bloodshed; but they were appeased by the wisdome of Octavia."

Sir Edwin further corrects our impression that Shakespeare was accepted by London society or was highly regarded in Stratford, and states that "Among the large number of letters in existence, there is not one that even mentions that the writer had ever seen or heard of W. Shakespeare of Stratford." We regret that lack of space, owing to pressure of more strictly medical matter, prevents our publishing the whole of Sir Edwin's letter.

NEW INVENTIONS

Martha A. Grafflin and Robt. J. Gregg, Los Angeles, Cal.,
Syringe, No. 1,046,584.

Bert A. Clayton, Davenport, Ia., assignor to B. J. Palmer,
Operating Chair or Table, No. 1,046,736.

Wm. T. Carnes, Kansas City, Mo., assignor to Carnes Artificial Limb Co., Kansas City, Mo., Artificial Arm, No. 1,046,966.

Wm. T. Carnes, Kansas City, Mo., assignor to Carnes Artificial Limb Co., Kansas City, Mo., Artificial Arm, No. 1,046,967.

M. E. G. Gottlieb, Heidelberg-Handschuhsheim, Germany, apparatus for enlarging the air passages of the nose, No. 1,043,924.

J. H. Drager, Lubeck, Germany, Method of Causing Artificial Respiration, No. 1,044,031.

Frank J. Follansbee, Hope, R. I., Self Conforming Anatomical Truss, No. 1,044,159.

L. T. Little, Homestead, Pa., Jaw Brace, No. 1,044,206.

Ferdinand Cerbo, Providence, R. I., Urethroscope, No. 1,044,348.

Geo. A. Evans, New York, N. Y., Inhaler, No. 1,044,367.

Moriz Rothenberg, Berlin, Germany, apparatus for use in the Treatment of Fractures of the Thigh or Upper Leg, No. 1,044,424.

John B. Campbell, New York, N. Y., Artificial Ear Drum, No. 1,045,812.

Welcome F. Sweet, St. Louis, Mo., Bloat Needle, No. 1,045,906.

L. P. Valiquet, Newark, N. J., Artificial Ear Drum, No. 1,045,917.

Fred H. Drake, Oakland, Cali., Capsule, No. 1,046,056.

Wm. E. McNordie, Hamilton, Texas, Surgical Instrument, No. 1,046,098.

J. W. Aylsworth, E. Orange, N. J., Plastic Phenolic Condensation Product, No. 1,046,137.

Per Gsota Ekstrom, Harnes, Sweden, assignor to Oktiebo-Vincenzo Lazzara, New York, N. Y., Artificial Leg, No. 1,044,542.

Joseph Payne, Belmont, Mass., Syringe, No. 1,044,688.

Andrew Wineman, Detroit, Mich., Dose-Measuring Bottle, No. 1,044,719.

Walter D. Ball, Philadelphia, Pa., Poison-Bottle Stopper, No. 1,044,726.

Franklin H. Bowly, New York, N. Y., assignor to Mary Webb, New York, N. Y., Nipple, No. 1,044,737.

Edmund M. Pond, Rutland, Vt., Surgical-Bandage, No. 1,044,817.

Jacques Wittlin, Vienna, Austria-Hungry, assignor to Siegfried Schlewinger, New York, N. Y., Antiseptic, No. 1,044,840.

Otto Bolte, Hamburg, Germany, Stethoscope, Hearing-Trumpet, Ear-Trumpet and like Sound-Conducting Instruments, No. 1,044,858.

Jno. W. Reddy, Geneva, N. Y., Nasal Guard, No. 1,044,910.

Eddie A. Bonar, Detroit, Mich., Artificial Leg, No. 1,044,980.

Otto Graul, Ludwigshafen-on-the-Rhine, assignor to Badische Anilin & Soda Fabrik, Ludwigshafen-on-the-Rhine, Germany, Process of Making Chlorinated Hydrocarbons, No. 1,045,139.

A. E. Guedel, Indianapolis, Ind., Obstetrical Anesthetic Machine, No. 1,045,140.

Wm. R. Lee, Rochester, N. Y., Arch Support, No. 1,045,303.

C. A. Ruflin, Louisville, Ohio, Irrigating Catheter, No. 1,045,326.

Vladimer Stanel, Prague, Austria-Hungary, assignor to Chemische Fabric Gedeon Richter, Budapest, Hungary, Process of Making Solid Stable Compounds Containing Hydrogen Peroxid, No. 1,045,451.

A. H. Tatum, New York, N. Y., assignor to Whitall Tatum Co., of New York, N. Y., Nursing Nipple, No. 1,045,456.

A. S. Campbell, Medford, Mass., Hot Water Bottle, No. 1,045,510.

Ceran Gaveau, New York, N. Y., X-Ray Tube Vacuum Controller, No. 1,045, 543.

A. L. Holtzman, East Orange, N. J., Tooth Brush, No. 1,045,552.

Alfred Loewy, Berlin, Germany, Rupture Truss, No. 1,045,574.

Joseph Payne, Melrose, Mass., Case for Hypodermic Needles, No. 1,045,607.

Uriah Hoke, Connwall, Pa., Artificial Limb, No. 1,045,707.

Albrecht Thiele, Berlin, Germany, assignor to Chemische Fabric auf Actien (vorm. E. Schering), Berlin, Germany, Ethyl Ester of 6-Methyl-2-Phenyl Quinolin-4-Carbozylic Acid, No. 1,045,759.

Adolphe Houdard, Neufchatel-en-Bray, France, Bed Pan, No. 1,045,793.

W. M. Ingam, Pueblo, Colo., Hospital Appliance, No. 1,047,231.

Chas. Katzenberger, Hoboken, N. J., Composition of Matter for Making Formaldehyde Candles, No. 1,047,416.

Rufin Steiner, Oberwyl, near Zug, Surtz, apparatus for Fettering Maniacs and Criminals, No. 1,047,457.

J. W. Aylsworth, E. Orange, N. J., Method of Forming Phenolic Condensation Products No. 1,047,484.

Geo. F. Jaubert, Paris, France, Process of Manufacturing Oxygenated Salts, No. 1,047,645.

Chas. H. Tallmadge, Chicago, Ill., assignor to Wm. H. Heath, Buffalo, N. Y., Method of Preforming Division, No. 1,047,854.

BOOK REVIEWS

A NEW WORK ON THE HISTORY OF MEDICINE.—W. B. Saunders Company, publishers, of Philadelphia and London, have in active preparation a work on the History of Medicine by Dr. Fielding H. Garrison, for twenty years Principal Assistant Librarian, Surgeon-General's Office, and Editor of the *Index Medicus*.

His book will present the history of medicine from the earliest ancient and primitive times; on through Egyptian, Sumerian, Oriental, Greek, Byzantine, Mohammedan and Jewish Periods, the Mediaeval Period, the Renaissance, into the Twentieth Century. There will be Appendices covering Medical Chronology, Histories of Important Diseases, Histories of Drugs and Therapeutic Procedures, Histories of Important Surgical Operations and Bibliographic Notes for Collateral Reading.

The illustrations are intended to stimulate the reader's interest in the picturesque aspects of medicine and in the personalities of its great leaders. The biographies will be confined to the most important facts and to interesting personal traits. The original bibliographic references to the important discoveries, operations and experiments will be given. Each period is to be followed by a brief survey of its social and cultural phases.

A REFERENCE HANDBOOK OF THE MEDICAL SCIENCES, embracing the entire range of Scientific and Practical Medicine and Allied Science. By various writers. Third edition, completely revised and rewritten. Edited by Thomas Lathrop Stedman, A. M., M. D. Complete in eight volumes. Volume one, illustrated by numerous chromolithographs and 611 fine half-tone and wood engravings; 936 pages; imperial quarto. The set, muslin, \$56.00; leather, \$64.00; half morocco, \$72.00 (subscription). Wm. Wood & Co., Publishers, New York.

The first edition of this work was the beginning of our medical library, after the usual college text books. While it has always been our policy to sell, exchange or give away medical books after three or four years, the Reference Hand Book has been retained. Merely for the anatomy and historic matter contained, it is still useful. In a quarter of a century, not only has it been necessary to prepare a work which retains only the frame of the original edition but the labor of architect and builders has passed to other hands. Only occasionally does the present list of contributors contain the names of those who made the first edition. In our own territory, we note the names of M. D. Mann and A. L. Benedict of Buffalo; also those of Julius Pohlman, lately deceased, and of M. A. Crockett, formerly of Buffalo, now of Bedford City, Va. While necessarily expensive, this work is economic, on account of its thoroughness and broad scope.

THE PRACTICE OF UROLOGY.. A Surgical Treatise on Genitourinary diseases, including Syphilis, by Charles H. Chetwood, M. D., LL. D., Professor of Genitourinary Surgery, New York Polyclinic; Visiting Genitourinary Surgeon to Bellevue Hospital, etc., etc. One volume of 824 pages, large octavo, profusely illustrated by line and half-tone cuts, and by six full-page colored plates. Muslin, \$5.00 net; half morocco, \$6.00 net. Wm. Wood & Co., Publishers, New York.

No attempt has been made to give an appearance of completeness by mere bulk of matter. On the contrary, the author has condensed as much as possible without omitting important details. Very wisely, he has avoided prolix discussion of moot points, and he has not construed the word *original* to mean an undue presentation of personal views but has drawn freely and properly upon the general fund of knowledge. The publishers are to be congratulated also on the high grade of mechanic work everywhere manifest.

LABORATORY DATA FROM THE DEPARTMENT OF EXPERIMENTAL MEDICINE.. Parke, Davis & Co., Detroit. (Phylacogens).

This is an elaborate report, which will, doubtless, be sent to any physician on request and which is well worth the careful attention of the profession.

GOLDEN RULES OF SURGERY, by the late Augustus Charles Bernays, A. M., M. D., F. R. C. S., second edition, revised by Wm. Thomas Coughlin, M. D., of St. Louis. Published by the C. V. Mosby Co., St. Louis; 280 pages, \$2.25.

The exhaustion of the entire first edition speaks well for the popularity of the original author. It is no disrespect to his memory to say that the omission from this edition of some general dissertations valuable as contributions to journals but scarcely appropriate in a text book, as well as the insertion of items inevitably overlooked and the addition of new chapters, has greatly improved the work.

HANDBOOK OF DISEASES OF THE RECTUM, by Louis J. Hirschman, M. D., President of the American Proctologic Society, Lecturer on Rectal Surgery and Clinical Professor of Proctology, Detroit College of Medicine. Revised and rewritten second edition, 338 pages; royal octavo; 172 illustrations, including four colored plates. Price \$4.00.

This author also has had the practical compliment of an exhausted first edition. While scholarly and thorough, the book is written especially in the interests of the general practitioner—or, rather, in the interests of the patients who, from the indifference to rectal diseases often displayed by the regular physician, have drifted into the hands of quacks, sometimes unscrupulous,

sometimes incompetent, sometimes both. The discussion of office treatment, including local anaesthesia, is especially valuable.

PRACTICAL MEDICINE SERIES, Vol. 10 of 1912 series. NERVOUS AND MENTAL DISEASES. Hugh T. Patrick and Peter Bassoe of Chicago. 236 pages, illustrated. \$1.25. (\$10 for the entire series of 10 volumes.) The Year Book Publishers, Chicago.

This review of periodic literature is now familiar to all, each series running through approximately a year and appearing in different colored binding to facilitate reference. The thoroughness of the reviews makes the publication valuable for more than temporary reference. A little personal experience well illustrates this fact. Several years ago, in tracing the literature of a subject, we turned down pages for reference. After a while we realized that so many pages were dog-eared as seriously to mar the appearance of the book and to interfere with its closing. But that book is still practically used for the references. The editor of this volume has so thoroughly reviewed the literature on poliomyelitis that we can pardon him for giving his own title as Professor at the Chicago Policlinic.

MANUAL OF ELEMENTARY ZOOLOGY. L. A. Borradaile, M. A., Cambridge. Published by the Oxford University Press. (American Branch, 35 West 32d street, New York.) 470 pages, 301 illustrations. \$3.75.

After a general discussion of the animal organism, the author develops the subject by careful analysis of type animals, beginning with the frog. Zoologic classification and evolution is thus left for presentation toward the close of the work, when the student has been prepared for it and can better appreciate the system of naturalists. From a cursory view, many would doubtless regard the book as unsystematic, whereas, the very fact that a natural rather than an artificial method is employed in developing the student's powers of observation, skill in dissection and in laying a foundation of facts for theory, indicates the keenest analysis and highest form of pedagogy.

THE SURGICAL CLINICS OF JOHN B. MURPHY, M. D., at Mercy Hospital, Chicago. Vol. 1. No. 6. December, 1912. Published bi-monthly by the W. B. Saunders Co. \$8.00 per year.

This issue is devoted mainly to conditions of the bones, joints and cartilages, but covers a variety of other subjects, as mammary cancer, salpingitis and a contribution on the use of radioactive substances in malignant conditions by Dr. Albert Caan. Dr. Murphy's safety razor scalpel is included among the illustrations.

MINOR SURGERY, by Leonard A. Bidwell, F. R. C. S., London. Published by the University of London Press. (Oxford University Press, American Branch, 35 West 32d street, New York.) 299 pages, 129 illustrations. \$3.75.

The dividing line between major and minor surgery is somewhat arbitrary, and the author interprets his subject sufficiently broadly. Antiseptics, the preparation of sutures, ligatures, splints, plaster and glass bandages, etc., are included. The various minor surgical conditions are well treated. The prescription of trusses, asphyxia, bed sores, blisters, vaccination, hypodermic injections, including 606, aspiratons and the obtaining of blood for the Widal, Wassermann and opsonic tests, tuberculin vaccinations, etc., render the work especially valuable for the practitioner who does not aspire to being a surgeon.

THE MEDICAL DISEASES OF CHILDREN, by T. Rowland C. Whipple, M. A., M. D., M. R. C. P., London. Published as above 417 pages, 67 illustrations. \$3.75.

The usual tables of dentition, weight, height, etc.; methods of feeding, etc., are given very briefly. Various diseases are discussed systematically.

DISEASES OF THE SKIN, by Willmott Evans, M. D., B. S., B. Sc., F. R. C. S., London. Published as above. 375 pages, 32 illustrations. \$3.75.

The first seven chapters are devoted to a general consideration of the subjects, with classification, methods of diagnosis, etc. Individual diseases are then treated in order.

A COMPEND OF HISTOLOGY: Henry Erdmann Radasch, M. S., M. D., Philadelphia. P. Blakiston's Son & Co., Philadelphia: 363 pages, illustrated, \$1.25.

This is one of the familiar brown-covered series of Quiz Compendes, being the third edition of the volume on Histology. Many a physician would have failed to get his diploma and license; many a man occupying a government position would be in private practice if it were not for such books as these—and this is the practical answer to the critics who object to such aids to learning, on the ground of superficiality and preparation for examination rather than the demands of science and humanity. Like the rest of the series, the book is well printed and displays careful attention to detail, discrimination in omitting non-essentials, and systematic arrangement, on the part of the author.

THE EVIL EYE, THANTOLOGY AND OTHER ESSAYS. Roswell Park, M. D., LL. D. (Yale) of Buffalo. Published by Richard G. Badger, The Gorham Press, Boston; 380 pages, \$1.50.

This collection of avowedly non-technical essays is dedicated to Sir William Osler, most appropriately, since the latter has also shown a great interest in medical history and various phases of scholarly research suggested by practical professional experiences and studies. The list of chapters, including Serpent Myths, Iatro-Theurgic Symbolism, The Relation of the Grecian Mysteries to the Foundation of Christianity, The Story of the Discovery of the Circulation and others, suggests an otium cum dignitate well spent. But, from personal acquaintance, we know that Dr. Park has not reached this stage, and we should be surprised if he ever does. Moreover, as one follows the stories, there is a wealth of suggestion and an illumination from various angles of practical experience that prompts an apology for the use of the word *scholarly*, so much has this word been misused. These essays do not represent the use of leisure to prevent ennui, but the projection of the learning and powers of observation of an extremely busy and practical man beyond the routine limitation of his tasks into regions of philosophy which greatly need the addition of a little pragmatism. If all essays on philosophic and historic subjects would be written by men equally well grounded in practical knowledge and with minds matured by hard work, the true value of these subjects would be better appreciated.

SKIN GRAFTING: Leonard Freeman, M. A., M. D., Denver. C. V. Mosby Co., St. Louis; 139 pages, 24 illustrations, \$1.50.

This is a practical monograph, systematic and up-to-date. It may not be out of place, as affording a measure of value to suggest that it is a matter of business for any physician, whether a surgeon or not, to buy this book if he has or expects to have a patient in whose case the question of skin grafting is even sub judice.

COMPLETE CATALOGUE OF MEDICAL PUBLICATIONS, The Rebman Co., 1123 Broadway, N. Y.

E. MERCK'S ANNUAL REPORT of Recent Advances in Pharmaceutic Chemistry and Therapeutics, Vol. 25, Merck & Co., 45 Park Place. N. Y.

These two commercial publications are free to the profession, except that 15 cents should be sent for postage on the latter. They are valuable for reference.

ATLAS OF DIFFERENTIAL DIAGNOSIS OF DISEASES OF THE NERVOUS SYSTEM, Dr. Henry Hun of Albany. Published by the Southworth Co. of Troy; 290 pages, illustrated, \$4.00.

This work consists almost entirely of large charts, tabulating nervous diseases from various standpoints. The first nine charts work from histories, signs, and symptoms, including those developed by electric tests and examinations of cerebro-spinal fluid, to diagnoses. The remaining thirteen charts analyse disease according to prominent diagnostic points, as motor paralysis, convulsion and spasm, disorders of speech and gait, etc. The tabular views suggest a cross between a system of qualitative chemic analysis and a genealogic chart. In our own early days, we spent hours, arranging tables of almost every conceivable medical topic, but we must confess to a growing dislike for "system" and a preference for familiarization with medical science unit by unit, without trying too hard to bring the various units into relation with one another. Still, there is a great deal to be said in favor of tabular reviews and Dr. Hun's work is elaborate and thorough. A word of warning may be in order. Such charts should not be followed blindly, like a series of guide posts along branching and forking roads. The student should preserve his sense of direction and should grasp the wonderfully complete analytic system by which the author has mapped out the geography of nervous diseases.

TREATMENT AFTER OPERATION: William Turner, M. S., F. R. C. S., and E. Rock Carling, B. S., F. R. C. S., with a chapter on the eye by L. V. Cargill, F. R. C. S., all of London. University of London Press; Oxford University Press, American Branch, 35 W. 32, N. Y.; 247 pages, illustrated, \$3.75.

After discussing anaesthesia, sepsis, haemorrhage, etc., various classes of operations are grouped according to systems and organs and the various surgical risks, methods of prophylaxis, and special points in dressing, nursing, use of postures, etc., are considered. The growing literature on the after-care of operative cases, is a valuable addition to the library of the surgeon and the general practitioner.

THE PRACTICAL MEDICINE SERIES; VOLUME IX; SKIN AND VENEREAL DISEASES, edited by Dr. William L. Baum of Chicago; MISCELLANEOUS TOPICS (History, Education, Insurance, Eugenics, etc.), Dr. Harold N. Moyer, Chicago; 237 pages, illustrated, \$1.25. Price for the series of 10 volumes, \$10.00.

This volume is the next to the last of the 1912 series. As a review of current literature, the Year Book Publishers present the most practical and scientific now available.

TREATMENT OF DISEASE IN CHILDREN, by G. A. Sutherland, M. D., F. R. C. P., London. Published as above. 403 pages, unillustrated. \$3.75.

We venture to make a general suggestion that the heading of pages with the general topic of the chapter would facilitate reference. The arrangement of the work requires no comment, but the title is significant as indicating that the author realizes that he is not dealing with a distinct branch of medicine but with ordinary conditions requiring some modification of methods of diagnosis and treatment because of the peculiarities of the immature human being. The great value of the book consists in this realization and in the practical experience of the author.

CANCER, THE PROBLEM OF ITS GENESIS AND TREATMENT, by F. W. Forbes Ross, M. D., F. R. C. S., D. P. H., London. Published by the Methuen Co., Ltd., 36 Essex street, W. C., London. 260 pages. \$1.25.

Without attempting to review in detail the original and still debatable theories of the author, it may be said that he lays great stress on the relative amounts of various chemicals, as calcium, potassium, iodine, etc., in different bodies, and the metabolic activities upon which such differences depend. Considerable stress is laid on apparent and sometimes unintentional cures of cancer by potassium enrichment, and the author describes various cases purposely treated with potassium and radium emanations. He explains the greater liability of women to cancer as due to physiological functions tending to drain potassium from the system. The apparent relative immunity to cancer conferred by cannibalism, in man and the lower animals, is criticised by allusion to exceptions to the law laid down by some and is explained as due to metabolic and dietetic factors.

SOME DON'TS, MEDICAL AND SURGICAL. Pamphlet. Published by the Fellows Co. of New York City.

These Don'ts are compiled from authentic sources, as shown by the bibliography of articles consulted, which include the one on Neosalvarsan, by Major Quinton, in our issue of August, 1912. Appendicitis, cancer, cardiac conditions, the stomach, genito-urinary diseases and syphilis are included. This pamphlet will be sent to members of the profession and is worthy of careful reading. It concludes with a good many Do's from eminent foreigners, regarding their advice as to Fellows' Syrup of Hypophosphites.

DIET AND HYGIENE IN DISEASES OF THE SKIN, by L. Duncan Bulkley, A. M., M. D., New York. Published by Paul B. Hoeber, 69 East 59th street, New York. 194 pages. \$2.00.

This consists of a series of lectures in which the reciprocal relations of articles of food and skin diseases, the effect of various hygienic measures, including the use of waters, courses at springs and baths, are discussed in detail. It is a most valuable work, but unfortunately, difficult to analyse briefly. We commend it to both specialist and general practitioner.

DIFFERENTIAL DIAGNOSIS. Diseases of the Nervous System. Pamphlet published by the Arlington Chemical Co. of Yonkers, N. Y.

Tabular reviews of symptoms and signs are illustrated by four elaborate colored plates, including 17 views of the brain and cord in diseased states. This is a valuable epitome of diagnosis, issued with the compliments of the company.

DIAGNOSTIC POINTS IN GASTRO-INTESTINAL DISEASE. Pamphlet published by the New York Pharmacal Association, Yonkers, N. Y., for complimentary distribution.

This is a book of 45 large pages, copiously illustrated. The nine colored pictures of oesophagoscopic views, the page of new instruments, for examination of the oesophagus, duodenum and stomach, the microscopic features of stomach contents and faces, and the illustrations of intestinal abnormalities are particularly noteworthy. The text very concisely states a wide range of diagnostic points. Altogether, this work is one of the most ambitious and valuable of its kind.

BLOOD PRESSURE. Technique Simplified, by Dr W. H. Cowing, Rochester. Published by Tycos Instrument Co., Rochester. 122 pages, illustrated.

This is one of the best of the publications of its kind, serving the legitimate purpose of facilitating the use of the instruments of the Taylor Instrument Companies, and, at the same time, presenting in convenient form the theory, observed facts, and technique of blood pressure examinations. The word *Tycos* is Greek, means a mason's pick or hammer and alludes to the stroke of the pulse. This etymologic explanation requires only a brief note of qualification, to the effect that the word was manufactured by running together part of the letters of the name of the firm, some years before we studied out the classic etymology.

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ORIGINAL ARTICLES

Dr. Friedmann's Curative and Prophylactic Vaccination Against Human Tuberculosis.

Short Report by DR. HESSE
Kissingen, Germany

AT the London Medical Congress in 1900 Robert Koch announced that the tubercle bacilli of man were not pathogenic for cattle and a little later Behring proved that cattle that were vaccinated with human tubercle bacilli were considerably more resistant against bovine tuberculosis. Immunization against tuberculosis which had never been achieved by tuberculin was accomplished by the inoculation of living tubercle bacilli taken from an animal of a different species. These experiments were continued and confirmed by others and of these F. Klemperer came to the following conclusion: Tuberculosis is curable if treated by immunization with living tubercle bacilli that are not injurious to the animal in question. As Koch himself considered this method promising, work was continued on that principle. Some years ago Friedmann announced that he had succeeded in immunizing guinea pigs with the tubercle bacilli of tortoises.

Vaccination, with living bacilli of a different species, however, nearly always causes abscesses at the vaccination spot and for that reason all attempts on human beings were impossible.

In November, 1912, Friedmann read a paper before the Berlin Medical Society announcing that after many years of hard work he had succeeded in getting a breed of Tbc. from tortoises which showed a higher degree of harmlessness (avirulence) than all predecessors. The result of experiments performed on guinea pigs with this breed of Tbc. was that the prevaccinated animals, though not immune, lived considerably longer after subsequent artificial tuberculous infection than animals that had not been prevaccinated (confirmed by Prof. Orth). Besides, that breed of Tbc. was absolutely harmless to guinea pigs even in large doses and hardly produced any infiltrations and so Friedmann no longer hesitated to commence experimenting on man. Also in these experiments on human beings the remedy proved to be harmless even in large doses, no matter in what way it was given, under the skin, into the muscles, into the veins, per os,

into the eyes or directly on open tuberculous wounds. Another important observation made by Friedmann, was that intravenous application, though it brings on almost immediate signs of healing, very soon loses its effect, and the healing process comes to a standstill. Friedmann found that the most effective way of applying the remedy is injection into the muscles, once, twice or three times, even oftener at long intervals. It is necessary that at the place of vaccination a swelling should form from the size of a nut to that of a small apple, and this swelling ought to be resorbed slowly. As long as this swelling exists and during its slow resorption the healing process proceeds. Should the resorption prove incomplete or should, for reasons still unknown, the infiltration get soft so that an abscess or discharge sets in, the healing process often stops, and further injections would prove useless and would only cause other abscesses or filtrations.

Friedmann believes he has discovered a way of preventing the tendency to abscess formation. He recommends injecting the first dose into the veins and then the subsequent ones into the muscles, and thinks that the intravenous dose increases the resorption capacity of the body. He calls this method the "Simultanmethode."

Up to the time of his lecture, Friedmann had treated about 1200 persons with tuberculosis of all kinds, and he gave an account of his amazing successes. Very advanced cases of tuberculosis of the bones, joints and glands were treated with the new remedy and were cured in a comparatively short time, while under the control of other doctors. Tuberculosis of the lungs is said to make rapid improvement in all cases except those where the breaking down is too far advanced. Tuberculosis of the kidneys and the bladder as well as that of the testicles were treated successfully; the same was said of tuberculosis of the skin, of the larynx and of the so-called scrofulous diseases of children.

Simultaneously with these cures, prophylactic injections were performed on children that were in any way threatened by the disease. Up to the date of his lecture Friedmann had inoculated 335 children, aged from one hour to three years. The injections, all of which had been made into the muscles, occurred without accident and so far have done no damage. On the contrary, the vaccinated children are said to have developed in a remarkably healthy way.

A most animated and lengthy discussion followed the lecture and the demonstration of a certain number of healed and improved cases. At first several doctors spoke whose patients had been under Friedmann's treatment, and who had watched the re-

sults with him. As a matter of fact, the accounts of these gentlemen—I mention Erich Müller, Karfunkel, Konrad Küster, Hey—were all extremely favorable, and even discounting the natural enthusiasm with which every new remedy is received, there still remains enough to cause amazement. Those who till then had not had the opportunity of testing Friedmann's method acknowledged that his ideas were theoretically well founded, and followed those lines that seem most promising. Thus Citron remarked, that of late years it has been more and more positively shown, that it is useless to try to cure or immunize with any dead virus. Every great success that has been achieved in this part of medical science, like Jenner's vaccination against smallpox, or Pasteur's vaccination against rabies, has been done with living virus, and therefore one may conclude that the same will be the case for tuberculosis. However, Citron continues, as long as we do not know the details of Friedmann's method, we must approach its practical application with great scepticism and care, for experience teaches us that a virus which seems to be avirulent may regain its virulent qualities under the changed circumstances of a different soil. Above all, the prophylactic vaccination can not yet be answered for—an opinion that was likewise expressed by other debators. It may be remembered as was mentioned by several authorities on this subject (Kausch, Aronson, Fritz Meyer Katzenstein) that with different kinds of tuberculine, as, for instance, that of Roesenbach or that of Fritz Meyer, good results have been achieved which are in no way inferior to Friedmann's. Therefore there is no reason to forsake the old methods as long as the new one is not more generally tried and known. Naturally, to be just, we must wait for the detailed publication which Friedmann promises to give regarding the preparation and the nature of his remedy. How often has our rash enthusiasm been disappointed. We must not forget that there is, perhaps, no other illness in which it is more difficult to form a correct opinion as to the effect of our numerous therapeutic measures. The individual cases of this illness are so different and changeable in their course that it is almost impossible to form a true prognosis, and many a case, especially of surgical tuberculosis, undergoes spontaneous cures.

The standpoint that the majority of German doctors take for the present on the subject of Friedmann's discovery has been well expressed in the declaration, which Prof. Bier made the other day in the Berlin Medical Society. He said: "It is certainly regrettable that a preparation that has not been sufficiently tested should be praised in the foreign daily press as a great discovery and prominent remedy. Till now it has in no way

stood its proof, especially as it is only in the hands of a single doctor and no sufficient control has yet been possible. In case as has happened before, the remedy should not prove satisfactory, it would do great damage to the reputation of German Medical Science and the Medical Profession, if the foreign press published without any contradiction that in the principal German Medical Society a favorable opinion had been given by well known Berlin doctors, for it apparently was not mentioned in the foreign press that some of the most prominent doctors had expressed grave doubts on Friedmann's remedy. "I must therefore publicly protest that my name should not be misused as recommending a remedy of the effectiveness of which I am yet in no way convinced. This declaration, of course, is not an opinion on the value of the remedy."

DERMOTROPISM.—The cutaneous eruptions caused by certain drugs form a subject for an interesting article by Bernard Fantus and A. W. Stillians, September *American Journal of Dermatology*). They conclude that dermatropism is, in general, in proportion to systemic irritant action; that non-irritant substances are not dermatropic unless they produce hyperemia or long-continued ischemia of the skin, or unless they give rise to anaphylactic reactions; and that anaphylaxis may play an important role in determining dermatropic reactions to drugs. The most common drug eruptions are the following:

Bromides and iodides—Papulo-pustules.

Arsenic—Erythema, vesicles, urticaria and papulo-pustules.

Quinin—Erythema, urticaria, petechiae and vesicles.

Antipyrin—Erythema, papulo-pustules and urticaria.

Belladonna, stramonium, hyoscyamus—Erythema.

Opium and morphin—Erythema and urticaria.

Chloral—Erythema.

Horse serum or diphtheria antitoxin—Erythema and urticaria.

RECTAL PROLAPSE IN CHILDREN.—Camillo Vidakovich, Klausenburg, Hungary (*Zent. fur Chir.*, October 12, 1912). For acute rectal prolapse in children the author, after replacing the gut, applies a broad pelvic belt of adhesive plaster placed low enough to hold the buttocks together without blocking defecation. The belt is reinforced by two fairly broad strips which cross in the midline at the lower edge of the belt, posteriorly, and are brought around either thigh, ending between the upper and middle thirds in front. The splint is removed as often as soiled, and kept for one month.

Some Practical Points Concerning the Operative Treatment of Bow-leg and Knock-knee.

By PRESCOTT LE BRETON, M.D.

Buffalo

Orthopadist to the Erie County and Columbus Hospitals

Assistant Orthopadist to the Children's Hospital

Member of the American Orthopadic Association

THE common deformities of bow-leg and knock-knee have been well understood for a long time and the treatment, both mechanical and operative, fairly settled. They form a very satisfactory class, because the results are good and the cases easy to handle. Parents can see for themselves the marked changes in contour, especially when they are presented with photographs of the case before and after. Although the great majority of these cases are due to rickets, there is a goodly proportion where the deformities are due to other conditions, e.g., infantile paralysis, tuberculosis of bone, injuries, congenital deformities, etc.



PLATE NO. 1.

Rickets: Psuedo-paralysis.

In the treatment of these cases by osteoclasis and osteotomy the following facts have impressed the writer in his personal experience. In the first place the wonderful change which these



No. 2. X-ray and standing posture four weeks after correction.

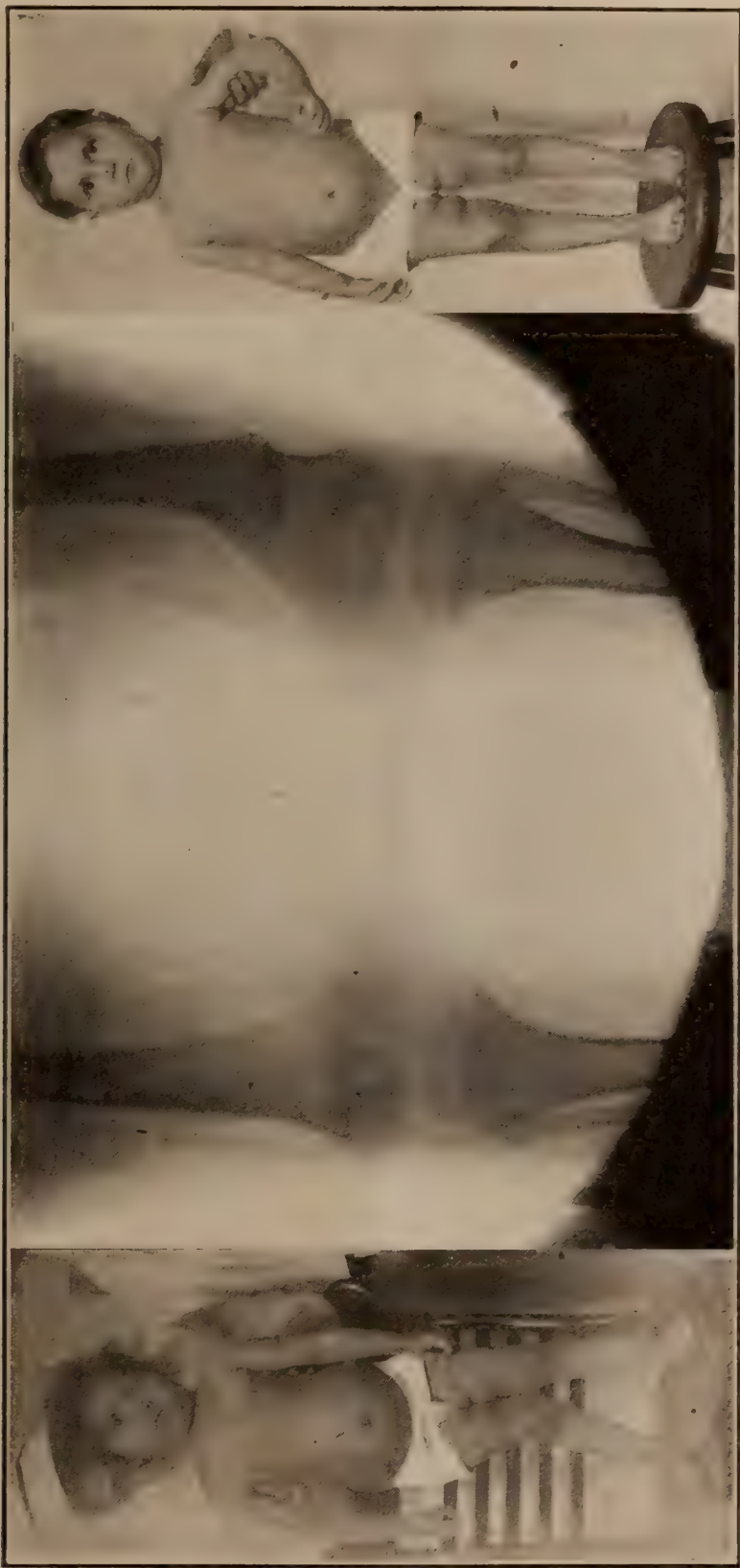
children show when the acute stage of rickets is treated by rest in bed, diet, fresh air and tonics, such as thyroid extract. The transformation in their mental and physical being is often extraordinary. Plate one gives the X-ray of a case of pseudo-paraly-



No. 3. Standing posture one month, and X-ray one year after correction.

sis in which the bone changes were so marked that at first there was some doubt as to whether the lesion was rickets or

some more serious disease of the skeleton. Yet this child in the hospital ward improved most rapidly and complete cure resulted from general treatment. Operations are regularly de-



No. 4. X-ray shows site of osteotomy. Note change in nutrition.

ferred until it is evident that nutrition has improved and the bones hardened to a certain extent. If this is not done it is possible for the case to develop, after the correction of one de-

formity, another deformity, due to weightbearing while the bones are soft.

The best way to get the consent of the parents, who are usually ignorant, is to say that the bones are to be bent straight under a little chloroform, because if an explanation is made in detail as to methods they become frightened. Even trained nurses will show signs of mental disturbance when bones are broken, and yet if the anaesthetist watches while the fracture is effected, he will note, as a rule, no changes in pulse, respiration or pupil.

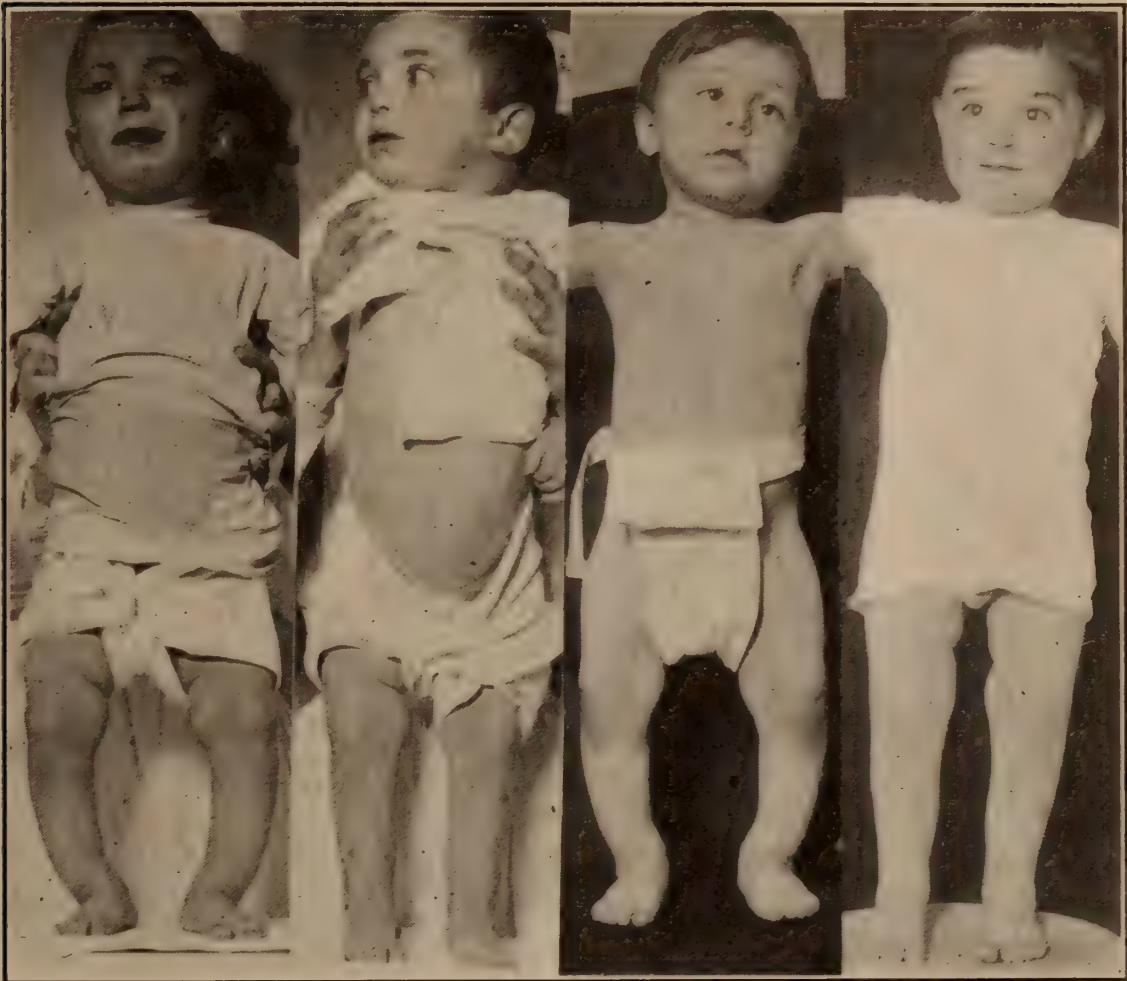


No. 5. Double osteotomy. Note change in nutrition.

The X-ray is very useful; before operation it shows the lesions and the site of the apex of the curve; afterwards it shows the fracture and illustrates the fact that slight overcorrection at one point will bring the leg into line and result in practical cure.

The ideal at the time of operation is a partial break with bending—the continuity of bone and periosteum being preserved. The manipulation of osteoclast and chisel is a matter learned by practical experience; speed in the manipulation of the osteoclast is important both for pressure and release; proper padding and avoidance of pressure on the epiphyses are essential; the osteotome or chisel can be guided by the sensation of the hand so as to avoid damage to soft tissues.

The method of application of the plaster is important. For bow-legs corrected below the knee the pelvis need not be included, but for any operation above the knee a spica should be used to hold the position. The protective should be snugly applied in just sufficient quantity to allow for a little swelling. If it is applied loosely or too thickly part of the correction may be lost. As the plaster sets the foot should be held at right angles and the rotation altered so as to bring the knee cap in line with the forefoot. After several hours have elapsed the case should be seen again to insure the fact that there is no marked pain



No. 6. Ordinary bow-legs before and four weeks after correction.

or signs of constriction. The only case of pressure paralysis the writer has seen occurred from neglect of this rule. The nurses in this particular case gave paregoric for pain and did not report the condition. The next day the toes were swollen and bluish and it was found that some swelling at the site of the osteotomy had caused constriction. A temporary weakness of the calf muscles followed.

All operators admit that sometimes on removal of the plaster, a deformity, not fully appreciated before, becomes much more

evident. For example, after the correction of a knock-knee, some bow-leg deformity appears or vice versa. This may call for a second operation.

The after treatment is of importance. The ordinary rule is for the plaster to be removed in three to four weeks, and the patient to remain in bed another week for massage and light movements. The bow-leg cases especially need changes in the shoes. Stiffened counters, Boston heels, and insoles are indicated to keep the weight-bearing line straight and to prevent intoeing.

EIGHTY-FOURTH CONVENTION OF GERMAN NATURAL SCIENTISTS AND PHYSICIANS.—V. Czerny, Heidelberg. Reported complete in *Zent. für Chir.*, December 14, 1912. The non-operative treatment of cancer. Czerny delivers a masterful oration on this subject and stimulates the interest in the treatment of non-operable cancers. He gives a summary of the most recent palliative measures which here and there have resulted so favorably as to give hope for the discovery, in the near future, of a sovereign remedy. He speculates very much to the point on how many institutes for cancer research might be built for the price of one battleship.

Should any physician feel at loss for further measures of relief in a case of inoperable cancer, he might read this article with profit. The more expensive measures, that is, the electric and radium treatments, it remains for the hospitals to carry out. We have about one death from cancer for every two physicians in Buffalo each year, to say nothing of the active living cases. We have the right to expect help from the new hospital on High street (which is more than half completed), if not in the discovery of a cure, at least in the dissemination of suggestions leading to greater activity in treatment of inoperable cases, so that no Aesculapian need shrug his shoulders over a case until it ends in death or the ever possible recovery. The only man that ever discovers anything in this old world is he who has found the fountain of perpetual youth, namely, chronic enthusiasm.

USE OF CAECUM TO REPLACE THE EXTIRPATED BLADDER.—P. Lengemann, Bremen (*Zentralblatt für Chirurgie*, December 14, 1912). Lengemann describes an improvement on the technic of Makkas. He uses the ascending colon as well as the caecum for greater capacity and attaches the ureters to a portion of the ileum, thus utilizing the ileocaecal valve to prevent back flow from the artificial bladder. The appendix is brought through the abdominal wall just as in Makkas's procedure.

Primary Carcinoma of the Nipple.

From Dr. Roswell Park's Surgical Clinic, Buffalo General Hospital

By BERNARD F. SCHREINER, M.D.

ON account of the rarity of this condition, I thought it advisable to report a case that came under the observation of Dr. Park.

In a review of the literature the first cases reported were those by Sir Astley Cooper (1). He mentioned three cases of *fungus medullaris mamillae*, which occurred in men. He operated on all of them. One died of metastatic growth in the liver and the other two had no recurrence.

In 1846 Sir Benjamin Brodie (2) reported a case of carcinoma of the mamilla in a very fleshy woman, who had noticed a stony hardness in the nipple for a long time. This he treated by cauterization with chloride of zinc and caustic potash.

Rose (3), in 1846, also reported a case of scirrhus carcinoma of the mamilla, occurring in an elderly woman, who had noticed the tumor in the nipple for several years. The breast was removed. In this case the growth had spread to the mammary gland.

Prescott-Hewett (4), in 1872, reported a case of intracanalicular carcinoma of the mamilla, occurring in a woman of forty. This tumor was not only extirpated, but the specimen has been preserved, and is now in the museum of St. George's Hospital, No. 13A, Ser. 15. The microscopic diagnosis is cylindrical epithelial cell carcinoma, which sprang from and spread by way of the large and terminal milk ducts.

In 1888 Battles (5) reported a case of carcinoma of the ducts of the mamilla. This occurred in a woman of forty-five, mother of many children, all of whom she had nursed. For four months she had noticed a small lump the size of a hazel nut in the base of the right nipple. There was no auxiliary involvement.

In 1890 Robinson (6) reported a case of carcinoma of the ducts of the mamilla, occurring in a man who had consulted him on account of cancer of the tongue. During his examination of the patient he noticed that the left nipple was enlarged and uneven, and was surmounted by a small ulcer which was covered by a scab. He extirpated the tumor. On microscopical examination this proved to be a carcinoma which evidently sprang from the epithelial lining of the milk ducts.

Mandry (?), in 1893, reported a case of ulcerating epithelioma and carcinoma of the ducts of the mamilla. This occurred in a widow of sixty-one, mother of three children, all of whom she had nursed. For two years she had been aware of a small

ulcer on the tip of the left nipple, which had begun to spread. The areola was infiltrated while the breast seemed normal. There were two palpable lymph nodes in the left axilla. The breast was removed. Microscopical examination revealed a carcinoma extending from the ulcerating surface down into the ducts.

Weil (8), in 1893, reported a case of ulcerated epithelioma and duct carcinoma of the mammilla. This occurred in a widow of forty-one, mother of six children, all of whom she had nursed. Four years previously she had had an abscess in the breast. During the past two years she had noticed a gradual enlargement of the left nipple. She also complained of some local pain. At the time of his examination the patient was poorly nourished, presenting a small tumor of the nipple, on the tip of which was a small ulcerating area with a depression in the middle. He removed the breast. Microscopical examination revealed numerous polygonal cells, which filled the alveoli and were surrounded by a dense connective tissue stroma.

The following is a brief history and the findings in the case herewith reported:

Miss Mary M., aged forty-two, American, clerk by occupation, entered the hospital September 9th, 1912. Complaint—enlargement of the left breast and nipple. Family and past history were good. There was no history of any injury. Menstruation began at the age of fourteen. For about one year the patient had noticed a few small lumps in the left breast. The nipple has always been prominent but is now very much larger, harder, and is quite tender upon pressure. There is no ulceration. The right breast also contains a few small nodules; its nipple, however, is normal. There are no palpable lymph nodes in either axilla.

On September 10, 1912, under ether, the left breast was removed by Dr. Park. The nodules in the breast proved on section to consist of multi-cystic dilatations of the ducts, though on microscopical examination there was no evidence of malignancy. The nipple was enlarged. A small tumor, about the size of a hazelnut and very hard, was found just beneath it. Microscopical examination of this tumor showed it to be a cylindrical cell carcinoma with alveolar structure. There were dilatations of some of the alveoli, which contained homogenous coagulated masses. The alveoli were separated by well marked and thickened connective tissue bands, which in places showed hyaline degeneration. The alveoli were lined by stratified cylindrical epithelium with a marked tendency to papillary ingrowth. In a few alveoli the epithelium was arranged in a single layer, was of high columnar type, with deeply staining protoplasm and a

basilar vesicular. nucleus. In the stratified areas, especially where there was a tendency to papillary ingrowth, the boundary of the cells was difficult to determine. The neuclei were more solid and took a deep stain. Mitoses were rare. There were seen also in the preparation large ducts lined by stratified squamous epithelium, containing homogenous coagulated masses, such as were described above as being found in some of the alveoli. In certain areas could be found typical cylindrical cell carcinoma, apparently springing from the stratified squamous epithelium lining the ducts. The above mentioned so-called alveoli had moreover a distinct basement membrane.



PRIMARY CARCINOMA OF NIPPLE.

Illustrating the distinctive features described in the text.

In consideration of the above findings we believe we have in this specimen a cylindrical cell carcinoma, springing from the epithelium, lining the ducts of the nipple.

In conclusion I should like to say not only that primary carcinoma of the nipple is a very rare tumor, but that all other varieties are in this location extremely rare. Linfors (9), in 1900, collected twenty-seven cases of primary tumor of the

nipple. Among those reported were myomata, fibromata, papillomata, epitheliomata, papillary cystomata and cystadenomata.

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TECHNIC FOR REMOVAL OF FOREIGN BODIES.—H. Fründ, Bonn (*Zent. fur Chir.*, November 30, 1912). Fründ suggests the use of sterile needles used as finders before the fluoroscope, *i. e.*, thrust into the tissues so as to come in contact with the foreign body, there to remain until the foreign body is removed, incision immediately following.

OPERATION FOR MOBILE KIDNEY.—A. Narath, Heidelberg (*Zent. fur Chir.*, November 30, 1912). The operation consists essentially in impaling the kidney on the twelfth rib through a rent in the capsule. It is to be regretted that the operation devised by Longyear of Detroit is not better known, *viz.*, the fixation of nephro-colic ligament thereby at once suspending the ascending colon and the kidney.

NEOSALVARSAN.—*International Journal of Surgery*, September, 1912. Editorial quotation: When neo-salvarsan is suspended in pure glycerine and then dissolved by the addition of distilled water . . . we have an intramuscular injection that is practically painless, and in the majority of cases absolutely so.

Some Practical Points in the Diagnosis and Treatment of Acute and Chronic Aural Suppuration and Their Sequellae

By JAMES F. MCKERNON, M. D.

New York City

(Concluded.)

As complicating acute and aural suppuration, we frequently encounter a thrombus of the sigmoid sinus, jugular bulb or internal jugular vein associated with one or all of these conditions the petrosal sinuses are not infrequently found involved.

These involvements of the blood current for clinical purposes can be spoken of under three headings:

First: Those that are typical. Second: Atypical. Third: In those cases where the jugular bulb and sinus adjacent are primarily involved without microscopic disease of the mastoid process.

In the Typical case, the symptom of most importance is that of temperature, and depends upon the amount of septic material entering the general circulation. If large in quantity, there is a sudden rise from normal to 104° F., 105° F., or 106° F. or higher, followed by a quick remission to near the normal point or even below. There may be one rise or several during a period of twenty-four hours, depending upon the rapidity with which the septic material is entering the general circulation.

If the patient is kept under observation for several days these fluctuations of temperature become more frequent, with greater variations. Chills, when present, are valuable aids in diagnosis. At times chilly sensations are present, and take the place of more definite chill. The pulse rate usually corresponds with the temperature. When high, it is rapid, when low, a little above the normal rate. Pain is not a frequent symptom, unless the phlebitis is associated with an extension into the jugular vein, or there is an infected chain of lymphatic glands adjacent to it.

Nausea and vomiting are not frequent until the later stages of the disease. Eye symptoms are present in only about one-quarter to one-third of the cases. Cerebration during the earlier stages of the disease is invariably normal, and formerly we were misled by this condition, as we expected the patient to exhibit cerebral manifestations. These are absent, however, except during the advanced stage of the disease. As the infection progresses there is loss of appetite, coated tongue and foul breath, with dry skin, which later becomes yellow, indicative of septic absorption.

The leucocyte and differential blood count are of value only as showing the amount of resistance of the patient, and the ab-

sorption taking place. Of more value from a diagnostic standpoint, is that of blood cultures, showing whether a bacteriemia is present or absent. Its presence is fairly positive proof of an infected thrombus, excluding, of course, all other suppurative conditions of the body.

The Atypical cases are those that follow a mastoid operation and progress favorably for a few days after the bone has been opened. A brief history of such a case from the clinical standpoint illustrates well the course of the disease in this type of infection.

Take a case of mastoiditis that has been operated upon from five to twelve days, the temperature, during this interval, following the usual course of a typical post-operative mastoid case. On the fifth or sixth day when the patient is seen, we find him restless, appetite variable, tongue slightly coated, pulse between 90 and 100, where the previous day it was between 70 and 80, and the temperature which was normal, has risen to 99° F. or 100° F., or thereabout. The next day the temperature will be from one to two degrees higher, with *no* marked remissions. There has been a change in the general condition of the patient. The restlessness is more pronounced. There is a distinct irritability, and a disinclination to take food. The tongue has become dry around the edges, with a thicker coating than the previous day. The pulse has increased in rapidity from 110 to 120 per minute. There is a complaint of general headache, not localized, and a feeling of nausea, and sleeplessness is a prominent symptom.

When seen the following day, the temperature has gradually risen to 104° F. or higher. The pulse is now ranging from 120 to 140 per minute, and shows a diminution in tension. The headache is more pronounced and the restlessness, sleeplessness and irritability are prominent features. The white, or gray coating on the tongue has now changed. It is brown and dry, like leather, and has a glazed centre.

If the disease progresses, we find within the next twenty-four hours the temperature has risen to 105° F., or higher. The pulse has become more rapid—140 to 150 per minute, showing a diminished volume and weaker, and with this condition an absolute refusal to take food. At this stage they become drowsy, and if aroused are exceedingly irritable and wish to be left undisturbed.

As the disease progresses, the temperature will practically become stationary, with no marked remissions. The pulse gradually becomes weaker and we have a patient presenting all the evidences of a general pyemia. A most valuable physical sign in these cases, from a diagnostic standpoint, is that of the bone over-

lying the sinus. For the first few days following the operation we find, on inspection of the mastoid cavity, every portion of it apparently doing well, and covered with granulations, except at one point, and this point is a portion of the bone overlying the sinus. Here the bone will be found darker in color than when it was first exposed at the time of the operation, and there will be no granulations found upon any part of it. In other words, we have a mastoid cavity showing all the evidence of repair, except this point of bone over a localized area of the sigmoid sinus.

If the infection progresses, we will find in three or four days the mastoid wound presenting a different picture. The parts that were formerly covered with healthy, firm, granulations have now become pale and flabby, with a tendency to soften and break down, while the point of bone over the sinus will remain dark in color and devoid of all reparative process.

If the sinus was exposed during the mastoid operation, we will find at this stage the dura covering it presenting a whitish or grayish appearance devoid of lustre, and at times covered with a plastic exudate. Blood examinations here are of equal value as when dealing with the typical cases.

When the jugular bulb and sinus are primarily involved they become so during the very early stages of an acute purulent otitis media, the pathway of infection being directly through the floor of the middle-ear to the bulb below, through one or more dehiscences, in this region that has persisted from birth.

The possibility of an infection occurring in this way has been demonstrated by the writer, who found that in 160 dissections in infants, ranging in age from birth to thirty days, that dehiscences were present in 28 7/-0 per cent., many of them being multiple. While it is not claimed that all of these openings remain permanent throughout life, we do believe that a certain proportion of them do retain their patency, as occasionally we find them on autopsy in adults.

The only diagnostic symptom in these cases is an unusually rapid rise in temperature from 99° F. or 100° F. to 104° F., 105° F., or even 106° F., or higher, and quite as sudden as the rise is a remission to normal or below. The temperature may remain low for several hours, and then quickly rise again to be followed by a rapid remission, and this may go on indefinitely until the end.

If the temperature range is allowed to repeat itself for several days, the clinical picture becomes one of general pyemia.

During the temperature remissions these patients feel remarkably well. This is a phase of the disease which the parents and those unaccustomed to viewing it, find hard to comprehend.

They see such an apparent improvement in the patients that they are misled as to the dangers existing, and often believe they are well on the road to recovery until the next temperature wave occurs.

While it is beyond the scope of such a paper as this to speak of the treatment in detail, I will mention here and there a point in the care of these patients.

First: Operate as soon as the diagnosis is made. Nothing is gained by delay and much may be lost. In the first and third class of cases, operate if possible during the remission of the temperature. By doing this there is less depression, and the system has a greater reactive power, and a more rapid convalescence will surely follow.

In operating upon the first and second class of cases, the rule usually followed is: If we find upon opening the sinus, a partial or firm clot, obstructing the lumen of the sinus, showing no tendency to disintegration, we remove it, establishing a flow of blood from both the distal and proximal ends, and control the bleeding by packing gauze against the distal end, and into the proximal. If, however, we find upon opening the vessel, pus or a clot broken down or undergoing disintegration, we cease further operation, for the time being at this point, and proceed to expose, ligate and resect the internal jugular vein, together with any of its tributaries that are involved, or any diseased glands encountered during the dissection, and then proceed to evacuate the sinus contents above and establish our blood flow from the torcular end.

Frequently there will be quite a free hemorrhage from the bulb end, even after the vein below has been removed. Here the blood comes from our unobstructed petrosal sinuses.

In the primary bulb cases, especially in children, if no pus or broken down clot be encountered, operative measures usually cease, after the evacuation of the clot and the establishment of the blood current from the sinus end. Should they, in the days that follow, show evidence of a further pyemic condition, then the vein should be resected.

In otitis meningitis whether in cases suspected or those well developed, we have a valuable aid from a diagnostic standpoint, by a withdrawal and examination of the cerebro-spinal fluid. By its early withdrawal from the spinal canal, we are made acquainted with its quantity, as determined by the amount coming through the canal, showing whether it be in excess of the normal amount, and whether it shows evidence of increased pressure beyond the normal, as it is being drawn.

The character of the fluid as drawn may show us at once evidence of disease of the meninges. At times when drawn it

appears microscopically normal, but again upon subjecting it to microscopic and bacteriologic examinations we frequently obtain early and valuable information as to the intra-cranial condition existing, and thereby are enabled to make an early diagnosis not only of meningitis but its type as well, when otherwise it would have been necessary to wait some time before the classical symptoms of the disease became sufficiently manifest for recognition.

Its examination is also frequently of value in a differential diagnosis between an typical brain abscess, encephalitis and meningitis. Lumbar puncture is also of a distinct value from the curative standpoint in cases of serous meningitis, as its frequent performance diminishes the intra-cranial pressure, and relieves the venous stasis within the skull.

When it comes to the treatment of otitis meningitis there is, unfortunately, but little to say. Of the serous type, repeated lumbar punctures, the application of ice externally and the internal administration of drugs, such as the bromides, to lessen the existing nervous irritability, is about all that can be done.

In purulent meningitis of otitis origin, I know of no specific; cases have been reported as cured by subdural drainage, but these were in all probability localized purulent areas, lying closely adjacent to the introduction of the drains.

The introduction of urotropin into the spinal canal, after the withdrawal of all fluid under pressure, has met with some success in cases where the predominating infection was that of the streptococcus. A concentrated solution, consisting of about one-half the quantity of that withdrawn from the spinal canal is introduced through the canula, the dose ranging from 30 to 80 grains, depending on the quantity of cerebro-spinal fluid withdrawn. This dosage can be repeated once or twice during twenty-four hours, depending on the general condition of the patient. If the temperature be lower and the general symptoms show an abatement it is best to wait for twenty-four to thirty-six hours before another dose be given, and this should be smaller in quantity than the one preceding it.

The writer has treated six cases of purulent meningitis by this method with three recoveries, all of the streptococcus variety; two cases were treated when the infection was that of the straphylococcus. Here the treatment had no apparent effect in alleviating the disease. In the sixth case the infection was that of the diphlococcus intercellularis meningitidis. Here no favorable result was observed in its administration.

Another case of the streptococci variety was seen in consultation with a colleague where the urotropin was given, one dose each day of fifty grains for four days with recovery. In these cases that recovered the cerebro-spinal fluid contained pus with

large numbers of streptococci to the slide and pure cultures of the organism were grown from the fluid drawn from the spinal canal.

While, of course, we are unable to say that these cases cited were of the type of a general purulent meningitis, the presumptive evidence was that they were, inasmuch as they exhibited the true clinical picture of the disease, plus positive laboratory findings. They may, however, have been cases where only a localized area of the meninges was involved.

The operation as devised and practiced by Haynes of draining the meninges through the cisterna-magna for this disease seems rational, especially if done early, but up to the present time no recoveries have been reported. Possibly the reason that this operation has thus far been unsuccessful has been because all the cases so operated upon were well advanced in the disease prior to its performance.

For several years the otologist as well as others has been availing himself of laboratory aid in the diagnosis of certain forms of aural disease. Some of these are confirmatory only of the clinical evidence presented, while others are of real value in arriving at a positive diagnosis.

From a series of blood examinations in over 400 cases the writer believes that these examinations will show two things:

First: the resisting power of the patient as shown by the number of leucocytes present, which if over 15,000 shows a good resistance. If daily examinations show a steadily increasing number of white cells, we infer that the patient's resistance is improving, even though the inflammatory process is more pronounced.

If, on the other hand, there is a small number of leucocytes from the first, the patient's resistance to the disease is poor, and during the further progress of the disease, should they steadily decrease the resistance becomes still poorer, and frequently this is an indication for an urgent operation, or calls for one being done earlier than would otherwise be necessary.

The second point of value for the clinician is the polynuclear percentage which shows definitely the amount of absorption taking place in the system as a result of the existing suppurative process. The normal percentage in the adult varies from 55 to 70, in the young child from 42 to 60. In a suppurative lesion of the mastoid process without complications the polynuclear percentage ranges from 70 to 80, where adjacent structures are involved, as the blood current in the sinus or vein it ranges from 80 to 96 per cent. In other words, the higher the polynuclear percentage the greater the absorption, and the more urgent the demand for operative procedure, and this is especially true if

frequent examinations show a steadily decreasing number of leucocytes.

If, however, repeated examinations show a decreasing polynuclear percentage, with a stationary or slowly decreasing leucocyte count, it is evident that the suppurative process is diminishing, and that nature is eliminating the poison from the system.

The relation between the leucocytosis and the polynuclear is the valuable feature. Increasing leucocytosis, with stationary or falling polynucleosis, indicates better resistance and less absorption. While decreasing leucocytosis, and increasing polymuclosis indicates less resistance and a greater absorption. We must bear in mind, however, that a suppurative process in a bone cavity does not exhibit as high a polynuclear percentage as when present in the soft tissues of the body. While this differential blood and leucocyte count are of value in determining the absorption and body resistance, they should by no means supplant the clinical picture as presented by the patient, but should be utilized as one of the links in the chain of diagnosis confirmatory of the clinical and physical signs exhibited.

Blood cultures have proven of valuable aid in determining the condition of the blood stream in phlebitis of the sinus, bulb and vein, and by availing ourselves of this aid we have frequently been enabled to make an earlier positive diagnosis of involvement of these structures, than if we had awaited a development of a majority of the symptoms which usually accompany this disease.

If the infection is of an active or virulent type of a rapidly growing organism, a well developed growth is usually at the end of eighteen hours, but if no growth can be demonstrated the culture should again be placed in the oven and subjected to a longer period of incubation, as a negative result does not at this time, necessarily mean that there is absence of a bacteremia. If at the end of forty-eight hours no growth can be demonstrated, it is probable that no bacteremia exists, though there are exceptions to the rule.

In two cases of the writer's a growth did not show in the active type of infection, and showed upon operation a firmly organized clot, with no evidence of disintegration.

Should the first blood culture be negative, and the clinical symptoms as exhibited by the patient continue, then other cultures should be taken, for a thrombus may be present in the sinus or bulb, and still not show in the blood by one or more cultures. The explanation of this is, that at the time the negative culture was taken there was no bacteria being thrown off from the phlebotic area on account of the firmly organized clot, but later

culture in one instance until after fifty hours incubation, and in the second fifty-five hours had elapsed before the culture showed a positive result. Both of these cases were of the class when softening and disintegration took place, colonies of bacteria were loosened from the thrombotic area and thrown into the general circulation, and the blood extracted from the vein at this time will show a true bacteremia present, so that a negative culture with a continuance of pyemic symptoms of a low grade, does not mean that there is absence of involvement of the sinus, and repeated cultures should be made. While I do not wish to be understood as advocating waiting in all cases of suspected sinus disease for a positive blood culture before operating, I do, however, urge that a blood culture be taken and repeated if necessary, provided the clinical evidence as presented by the patient be not sufficient for a positive diagnosis. If the clinical picture be sufficient for such a diagnosis, then the culture is merely a confirmatory but most valuable aid.

My belief, based upon a large number of blood cultures, is that fewer operations on the sinus, either exploratory or complete would be done were blood cultures made a part of the routine practice of the otologist in these suspected cases of sinus involvement.

We should remember, however, that a suppurative process existing in other parts of the body can and does give rise to a bacteremia of the blood current, and the existence of such a condition should be eliminated prior to localizing it in the sinus or bulb.

Want of space and the desire to no longer trespass upon your time compel me to bring this paper to a close. I have tried to speak in a general way of many phases of aural suppuration which must be of interest to the general practitioner as well as to the otologist, for the former sees many of these cases first, and it is to him in the future that will belong, to a marked degree, the credit of a decrease in the number of cases of chronic purulent ear disease, for if recognized and treated early an acute otitis need rarely reach the chronic stage.

When, however, this stage of middle-ear disease is encountered, no time should be lost in rectifying the pathological conditions existing, not alone to prevent the possibility of the occurrence of the complications under discussion, but what is of the utmost importance to the patient, to preserve his hearing.

62 West 52d Street, New York.

TWO POLICE WOMEN have been appointed in St. Paul.

BUFFALO MEDICAL JOURNAL

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The injunction, "Eat what you like," is justified only as it implies "Eat what you lack."

Guarantee of Interneships.

The recent decision to increase the number of years of medical study to five in Pennsylvania, the last year consisting mainly of hospital work, and the gradual insistence on experience as interne by various government services and civil service boards, establishes a precedent which must result in a guarantee of such practical experience by every medical college in the country.

While it will probably be several years before hospital service will be an actual requirement for license by state boards generally, and while practical training in hospitals does not necessarily imply an interneship or conflict with the continuance of the institution of interne service under the control of the hospital itself, it is none too soon for the medical profession to discuss seriously the problem involved.

A quarter of a century ago there were comparatively few hospitals; those that existed were almost entirely confined to large cities, and, except for the very large cities, these were almost entirely of the general type and of relatively large size. At present there are few towns of 10,000 inhabitants without a hospital, and there many villages well provided in this respect. Private or semi-private hospitals have multiplied and there are many hospitals more or less specialized in their field of work.

On the one hand, the large, general hospitals scarcely afford an adequate supply of interneships; on the other hand, the small and special hospitals can scarcely find enough graduates to perform the duties of internes. The employment of undergraduates as internes interferes with the college work, and, conversely, the

demands of class attendance interfere with the proper performance of duties by the internes.

The problem of fulfilling the legal or economic requirement of a fifth, hospital year, can be met by the extension of the system of ward and laboratory classes and, in many respects, proper regulation of instruction can be best secured by this plan. This method would not directly interfere with the present custom of interne service. But, certain objections may be foreseen. In the first place, it is altogether likely that the average graduate, whose investment of time in preliminary and technical training will bring him to a minimum age of twenty-five instead of twenty or twenty-one, will not be anxious to accept further interne service unless at a salary (the old method of no definite preliminary training and two or three years of medical attendance having made it perfectly possible and by no means rare for a bright boy to graduate at twenty, and have his diploma withheld till he should have reached his majority, meanwhile serving as interne). This objection is not without its bright side. In the second place, a formal appointment as interne is superior to any possible system of class work by affording opportunities for emergent experience and by adding to the technical training, the maturing influence of professional and institutional responsibility. Thirdly, the undue extension of the system of ward classes involves an appreciable risk to patients, not present, except by gross indiscretion, under the interne system. Fourthly, the presence of students, who have finished their course, except for practical work, and who have the responsibility only of students, can scarcely fail to magnify the friction due to officiousness, greater personal acquaintance with patients, ambition, etc., already noticed to some degree. There will hence, be a tendency, both on the part of attendants, internes and patients and of the individuals and organizations supporting benevolent institutions, to favor hospitals not used for teaching.

How far these theoretic objections will manifest themselves practically can only be conjectured, and it is possible that they may be mere apprehensions. At any rate, it should be clearly understood that they are not presented here as either original or personal convictions of the editor.

If the validity of these objections is not recognized, the fifth year of medical study will develop as an extension of ward and laboratory classes, with special lectures and demonstrations and whatever additional problems are created regarding hospital management and supply of internes will be met as they arise, experience gradually indicating the best solutions. It is altogether likely that there will also arise a protest from students, particularly those contemplating some specialized practice, certain ac-

cepted forms of post graduate study, or having opportunities for something like the old system of preceptorship.

It is not so much the personal conviction of the validity of these disadvantages as the fact that, already, most well equipped colleges can place 90 per cent of their graduates as internes and a personal appreciation of the value to the individual student of a formal internship, as well as of the value of his services to the average hospital, that inclines us to favor the other method of solution. This consists in the adaptation of interne service to the requirements of laws regarding graduation and license. But this method of solving the problem also involves some difficult corollaries.

First of all, every medical college will be obliged to guarantee promptly, upon the completion of the didactic course, an adequate interne service. To do so, it must control, not only informally but by legally invested power, a large amount of clinical material in hospitals. To secure this power, without resort to arbitrary methods at variance with ethical ideals and legal precedent for this country, both the college and hospital must be under more formal legal control and must be more generally representative of the medical profession. On the whole, these prerequisites are rather favorable to professional solidarity and efficiency than otherwise and while involving some personal sacrifices, they will be beneficial.

Secondly, the plan of elevating interne service to a part of the medical curriculum will require some systematic attempt to solve the problem of service in small and specialized hospitals. A similar problem is already realized in regard to nursing but has not been met. Both problems can be solved by exchange of services so as to afford a proper generalization of experience for both physician and nurse in training. This solution implies a waiving of certain personal preferences, a compulsory co-operation among hospitals not strictly private and various minor inconveniences.

The ultimate solution of all the details of the problem will, of course, require years, and it cannot be accurately foreseen how all the necessary arrangements will be perfected. We have not attempted to prophesy nor to present personal views beyond the degree inevitable to anyone who essays a consideration of a novel problem and who must, therefore, trace some imaginary routes in an uncharted territory and point out the probable advantages and disadvantages of each. What we want to emphasize is that the time at which the solution will be required is inevitably approaching, perhaps rapidly, for we live in an age of swift changes; and that fewer serious errors will be made if the profession seriously considers the problem in advance of an emergency, and acts concertedly.

Are Germ Diseases Practically Non-Communicable?

Soon after the general acceptance of the "germ theory," there was a natural exaggeration of the importance of contact or even of propinquity in spreading disease. Of late, the pendulum has swung rather to the opposite extreme. Numerous articles have appeared in regard to tuberculosis, and while no author has been so bold as to deny the existence of the tubercle bacillus, there has been a tendency to the pessimistic view that the bacillus was so ubiquitous that any one predisposed to the disease would contract it somehow, some time, and somewhere, while one not so predisposed might expose himself to the implantation of the bacillus with impunity. Perhaps no one has so expressed himself but many have plainly implied such a view, in estimating the practical importance of exposure. Similarly, with regard to measles, and with a more or less explicit extension of the argument to other diseases usually considered actively contagious, it has been stated that the alcove arrangement of wards is sufficient to prevent infection, that the disease is not air-borne, and that disinfection might be omitted or has actually been discontinued without increase in the incidence of the disease.

Without in the least questioning the importance of predisposing and contributing factors in securing the implantation of a specific disease germ—and we say *germ* instead of bacterium, because a great many such organisms are protozoa, fungi, etc.—we feel that the essential element is, after all, the germ itself. Almost all disease germs are nearly absolutely obligate parasites, that is to say, they would succumb to ordinary vicissitudes of life outside of a host, in a comparatively short time, though also capable of retaining infective virulence for long periods under favorable conditions. In the case of a germ which is infectious only in a definite stage of its life cycle, or which requires some very special mode of implantation, contagiousness may be reduced to a theoretic degree. Otherwise, we believe that no chances should be taken and that every known method of preventing infection should be practiced.

Editorial Announcement.

As the Abstracts are the only part of the JOURNAL which can be cut off at any point to complete a page and left over—not too long—without detriment, and as all other departments necessarily vary in space from issue to issue, it has been decided to place them at the end of the JOURNAL, except such as are required to complete pages in the Original Department, and thus allow every original article to begin at the top of a page. This will save at least a day's time in printing.

Our readers may have noticed that the Department of Miscellany has been discontinued, items that might be placed in it, having been relegated to the advertising pages, topics of interest, etc., or omitted as not appropriate to a medical journal. We have increased the average issue by four pages. More important has been the effort to condense in all departments, so far as practicable, and to omit meditative articles and addresses from the Original Department.

We ask the opinion of our readers on two points: Shall we continue the Department of New Inventions or shall it be discontinued or greatly reduced by selection? Shall the Personals be maintained as at present, or shall they be reduced to voluntary notices of removal, extensive travel, etc.? It is scarcely necessary to add that we always welcome suggestions as to means of improving the JOURNAL—which include some necessities which are obvious.

Regarding some suggestions that we establish a bureau of advice regarding problems arising in practice, or that the regular editorial section include articles on analysis of urine, stomach contents, therapeutic notes, etc., we want, first, to express our thanks and to make the following explanation. As to the bureau of questions and answers, we know just about enough to dig out a diagnosis and prescribe the proper treatment, in a moderate percentage of cases and in a rather limited field, when the patient is on hand for physical examination and every facility is afforded for a careful personal study. To give advice on second-hand information, and in an off-hand way, on all sorts of conditions, is beyond the power of the editor. It has seemed wise, also, to avoid entering the field of original scientific articles and not to attempt dictactic discussions drawn largely from textbooks that might better be followed directly by the reader.

TOPICS OF PUBLIC INTEREST.

PROPOSED EXTENSION OF MEMBERSHIP OF A. M. A. Dr. George H. Simmons published by request, in a recent number of the Jour. of the A. M. A., his plan to include as formal members of the Association, all members of County and State Societies. These aggregate about 70,000, whereas only 36,822 are in formal membership in the A. M. A. To the latter body he would apply the term Fellows. He states very frankly that this is merely a change in name, though having the practical advantage of impressing the affiliation of all members of subsidiary organizations and thus lending moral strength to the national organization. As the management of the Association would remain in the hands

of the 150 delegates, the Fellows would lose no prestige by the extension of the membership.

This plan receives our cordial support, subject to the following minor suggestions: If possible, it seems to us that combined membership in county, state and national organizations, should be secured at a flat rate, with division among the respective organizations, according to their financial needs. This is, of course, a point as to whose wisdom only those in close touch with affairs, can decide. It is not one of vital importance and yet there is no question but that professional organization loses much of its potential numeric strength on account of the cost. There are probably 20,000 physicians who contribute nothing toward professional organization at present, but who would pay \$5 a year if the benefits of the whole plan of organization could be secured. This would go far toward compensating for the loss of 36,822 additional five dollar fees and the actual expense is comparatively small for additions after the first few thousands.

The second suggestion is by no means original, though radical. It consists merely in restoring and extending the plan of permanent membership so long and so satisfactorily employed by the Medical Society of the State of New York. We believe more and more as opportunities for observation increase, that the greatest obstacle to practically universal support of and participation in professional organization, is the notion that the delegate system prevents the average member from having a voice in the affairs of the organization, especially since the delegates cannot act directly to control details. This belief should not be construed as a personal objection to indirect, representative and executive government of the organized profession. But the old delegate method of securing permanent members, worked well. It limited the actual management of affairs, up to the necessary committees and officers to whose judgment details must always be left, to a body that was large enough to be democratic and still not too unwieldy. Every member of the profession who affiliated himself with the organization had, at once, the practical benefits of the organization, and he also felt that with reasonable restriction as to maturity and manifestation of an active interest, he could take part in the control of professional interests. A very practical disadvantage of the present Houses of Delegates, state and national, is the conflict between strictly medical and official duties. This tends naturally to a government of the profession by men who are not especially interested in the actual practice of medicine but rather in its political aspects. If the delegates were simply representatives of the profession, who could be instructed and if necessary changed, to carry out the wishes of the general membership, and who were directly

responsible for the policy of the organization, very little friction would result, but, as a matter of fact, the delegates simply exercise the functions normally devolving upon the entire enfranchised body so that the disaffected argue, with literal truth, that there are "wheels within wheels." Now, to prevent misunderstanding, let us add that we personally care as little about professional politics, in the sense of active participation, as we do about politics of clubs or of the nation; and that we take no stock in the cries of "graft," mismanagement and extinction of liberty; but we do believe that there is a general and proper demand that the organized profession should be kept as near the ideal of a pure democracy as possible.

The plan of affiliated and permanent delegate membership seems to us to conform to this ideal as closely as is practical. It is not a theory but a method which has the precedent of the body which really fathered the A. M. A. It worked well in practice for many years and under conditions which show its applicability, with comparatively minor modifications, to the largest professional concourse which can be expected for the whole country for many years to come. It is only occasionally that the registration of physicians at the A. M. A. meetings is more than four times that at the Medical Society of the State of New York. It is doubtful whether regular and active attendance at the former averages more than double that of the old permanent members of the latter, with allowance for general increase of population. The selection of permanent active members in the national organization would naturally depend on somewhat more rigid requirements and might well be made on a basis of a smaller ratio to aggregate membership. And, as intimated, the actual control of affairs would still remain with officers and committees, the only practical difference being a more direct and immediate check upon them by the general membership. This check, we believe, would do more to relieve a feeling of apprehension and hostility to professional organization than to effect radical changes for, as stated, we do not believe that there are any great abuses requiring correction. On the other hand, the system of permanent membership would prevent the former temporary swaying of the A. M. A. by self appointed political leaders, acting on a large and unselected popular gathering of physicians.

INVESTIGATION OF THE WHITE SLAVE TRAFFIC. John D. Rockefeller, Jr., like many other young millionaires, is interested in this study, but along different lines from those often pursued.

CATS SUSPECTED OF CONVEYING SMALL POX. Berkley, Cal., is waging a war of extermination in this belief.

Source of English Words

Anglo Saxon and English.....	3681
Dutch	207
Low German.....	126
German	333
Scandinavian	693
Through French—	
German	85
Old High German.....	154
Middle High German.....	27
Teutonic	225
Romance Languages	297
Latin	4842
Late Latin	828
Italian	162
Celtic	170
Latin (direct)	2880
Prevençal from Latin.....	25
Italian	99
Spanish	108
Portuguese	21
Greek, direct or through Latin, Late Latin, French, etc....	2493
Slavonic	31
Litheanian	1
Asiatic (Aryan)	163
European (non-Aryan)	20
Semitic—Hebrew	99
—Arabic	272
Asiatic, non-Aryan and non-Semitic.....	135
African	32
American	102
Hybrid	675
Unknown	12
Total list traced.....	19,160
(Literary Digest, January 25, 1913, authority not stated.)	

COLLECTION OF CANCER STATISTICS. Dr. H. R. Gaylord announces that the N. Y. State Institute for the Study of Malignant Diseases (Gratwick Laboratory) is collecting various details regarding cancer cases, especially for Buffalo, though, with the co-operation of the State Board of Health, for the state generally. Cancer specimens, obtained at necropsy, will be examined and returned with report. Specimens should be placed immediately in 10 per cent. formalin solution and may be forwarded in an ordinary mailing case. Application should be made, in advance for a supply of cards for the proper notation of data required.

STUDENTS IN NEW YORK STATE. With a total population of 9,450,000, estimated from the average rate of increase from the census returns of 1910, the state had an attendance of 1,956,365 pupils in 1912. 1,329,925 were in grammar schools, 180,010 in high schools, 10,838 in normal and training schools, 41,381 in colleges and professional schools. About 19 per cent. of an average population or about 1,800,000 children, lie between the ages of 5 and 15, and about half as many in the next five-year period, or 4/10 as many, 720,000, in the high school period. In other words, about three-quarters of all children of grammar school age are actually in school and about one-quarter receive a high school education, though all do not complete it. This is an honorable but, nevertheless, a heavy burden, and doubtless accounts, to some degree, for the general complaint of hard times. Almost exactly a quarter of an average total population consists of males of twenty-five years and over, and it is this part of the community that bears almost the total burden of taxation. For the public schools alone, this tax was a little more than fifty-nine million dollars, or a trifle over \$25 a head. and we may add that it is worth it, but that it must represent just about so much economy along other lines.

RELATIVE TYPHOID FEVER MORTALITY. Pittsburgh proper had a death rate of 13.4 per hundred thousand population in 1910: Alleghany City, 46.9. The former had filtered water, the latter unfiltered from essentially the same source.

CONTRACT PRACTICE. Dr. Richard Cabot cites the University of California as an example of the benefits of contract physicians to cure and prevent disease. 7000 students pay \$5.00 a piece a year, which secures the services of a number of well qualified and well paid physicians, who are relieved both of the financial worries of private practitioners and of the embarrassment that the conscientious physician feels with regard to volunteering advice as to prophylaxis and prompt attention to symptoms. (Note—Some years ago we suggested that physicians might well be employed by medical congregations, analogous to churches, their duties being ministrative, social, educational, and in the way of directing philanthropy. While, on account of abuse, the term contract practice is, to the profession, like a red rag to a bull, it should be clearly understood that the essential idea is all right, that a contract by a group of individuals for permanent medical service, is a form of insurance, and that the flagrant wrongs of contract practice are due to unfair means employed by both contracting parties, and, particularly, because the estimate of the value of the insurance is inadequate.)

TUBERCULOUS CATTLE. Fifteen of forty-four cattle owned by S. J. Champlin of Canewango were found to be tuberculous on February 27 and were shipped to Buffalo to be killed. Further investigation will be made. Why not kill and burn tuberculous cattle on the spot?

OFFICIAL SYNTHETICS. Three are recognized in the B. P. of 1898, phenacetin, phenazone and sulphonal; nine in the U. S. P. of 1905 and in the Danish Pharmacopoeia of 1907; twenty-eight in the German of 1910.

STREET CAR SERVICE. The International R. R. Co. is removing the smoking compartments from its suburban cars. While theoretically disapproving of smoking, for hygiene and aesthetic reasons, we do not believe in compulsory reform. The majority of men and probably half of the patrons of street and interurban cars smoke. Decent and adequate accommodations should be provided for them, as in European countries. Buffalo is agitated over the near-end cars. Cars of the 5000 type in Buffalo and Chicago have proved satisfactory. The near-end cars do not run smoothly and, despite very pretty diagrams, the air is heavily charged with CO₂, H₂S, Allyl sulphid, etc. When overcrowded, much time is lost in loading and discharging passengers. In case of an accident they will prove dangerous. There is a rear, emergency door. We have never witnessed a state of over-crowding considered emergent enough to allow the use of this door, and we have heard a report of a conductor who tried to open one to replace a trolley pole on the wire and found it jammed tight. It is generally held that the European rule of prohibiting passengers to board a car after its seating capacity is exhausted—with a customary allowance of a few standing passengers—would not be tolerable in America, but it does not cause so much delay as is usually believed. It seems to us that a fair compromise would be to apply this rule at starting points and in passing car barns and to require reserve cars to be kept on hand at such points; then to allow any number of passengers to be picked up at intermediate stops till the steps and coupling rod are full, as at present. Also, while there is much to be said in favor of a curfew law, we think that the influence of the street car companies in discouraging night travel is exerted unduly. If necessary, put on small cars, but run them at reasonable intervals all night.

X-RAY LESION. Dr. J. M. Scott of Kansas City, one of the pioneer Rontgenologists, has had his right hand amputated as a result of the irritation of constant exposure to the rays. He intends, however, to proceed with his work.

LIABILITY OF SURGEON FOR FAILING TO FIND APPENDIX. A La Porte, Ind., woman is suing for \$16,665 damages. We trust that the suit will fail. Humiliating as the confession may be, there is no detail in the wide range of medicine and surgery where the most expert and most conscientious may not fail. We have personally encountered cases where hernia and orchitis, pneumonia and gall stones, gall bladder and appendix inflammation could not be immediately differentiated, and, as an interne, saw a case in which several competent physicians and surgeons overlooked a fracture of the arm for several days, the patient having given no history leading to suspicion of any surgical complication and the correct diagnosis being made only after a dispute as to whether it was the nurse's duty to brush the hair of a ward patient apparently able to care for herself. In the case of the appendix there are ample reasons why prolonged search should not be made.

MICHIGAN MORTALITY RATE. For 1912, 13:1000. Tuberculosis caused almost exactly one death in 17. A quarter of a century ago civilized communities considered a death rate of 20:1000 as normal, and tuberculosis caused about 1 in 10 of all deaths.

THE LIBRARY OF THE COLLEGE OF PHYSICIANS OF PHILADELPHIA contains about 98,000 books of all kinds. About 70,000 are bound.

LETCHWORTH VILLAGE, the state institution for the segregation of epileptics and feeble minded persons, largely due to the bequest of the Buffalo philanthropist, will soon be begun. The first group of buildings will include four dormitories, attendants' home, dining hall, laundry, power plant and store house.

ST. LOUIS CONSUMPTION CURE. Dr. Heath makes claims for a vaccine somewhat analogous to that of Friedmann, but not in such sweeping terms.

MUNICIPAL DIAGNOSTICIANS. St. Louis had added to its Health Department staff a chief diagnostician and ten assistants, whose work will be confined mainly if not entirely to contagious diseases. It seems to us that St. Louis is setting rather an expensive precedent that such official recognition may still further increase friction with private practitioners, especially as the diagnosis of contagious diseases often present great difficulties leading to disputes.

OBESITY. Justine Masson died November 28, 1912, in an insane asylum in Montreal. She weighed 780 pounds and was considered the heaviest woman in Canada.

W. H. Robin of Burnham, Ia., weighs 437 pounds and is 5 feet 3 inches tall.

Frederick Hoffman died January 27 in Buffalo, weight 425 pounds.

Everett Shaw died October 17, 1912, at North Abington, Mass., weight 400 pounds, aged 40.

CENTENNARIANS. Samuel Neuin, a Pennsylvania German, was born in Berks County in December, 1804, was rejected as too old to engage in the Civil War, and died last February, after only two weeks' illness.

Jacob Ross, born in Springfield, N. J., June 1, 1812, died in Dansville, N. Y., March 2, 1913.

William Redmond died recently in Oakhurst, N. J., aged 103.

Miss Elizabeth Woodbridge Thompson, a descendant of Gov. Saltonstall, died at Saratoga Springs, February 26, aged 102.

Mrs. Mary Reese, whose husband died at 96, died at Gordonville, Pa., March 4, aged 101.

Peter Morrison, recently of Albany, N. Y., now of Sacramento, was robbed of his purse in San Francisco March 6. His hundredth birthday occurred March 11.

Pierre Chamel is living in Paris at the age of 105. For half his life he is said to have lived on milk.

Mrs. John Shirk of Morgantown, Pa., was 100 years old March 1. She is in good health.

PHYSICIANS IN EUROPE (See page 360, January, 1913, issue for physicians in the U. S.) The following statistics are approximately correct:

Country.	Population Millions.	Physicians.	Ratio.
Europe	437	200,000	1:2,180
England	36	48,000	1:750
France	40	32,000	1:1,250
Germany	65	26,000	1:2,500
Italy	35	24,000	1:1,450
Russia	160	20,000	1:8,000
Austria	28	13,000	1:2,150
Belgium	7	12,000	1:600
Spain	20	8,000	1:2,500

INJUSTICE TO SENATOR GALLINGER. In the March issue, in alluding to the two physicians in the U. S. Senate, we unintentionally did Dr. Gallinger an injustice, though we followed what appeared to be good authority and merely stated that he was supposed to be opposed to vaccination and animal experimentation, following our custom in eliminating any comment of an offensive nature, as we always concede the right of anyone to hold any opinion, however opposed to our own. One of our editorial acquaintances calls attention to the fact that Dr. Gallinger has represented New Hampshire, not Vermont, in the U. S. Senate for over 25 years and that the Medical Society of the District of Columbia has publicly expressed its appreciation of his efforts on behalf of the profession during his public career in the Senate. We are greatly obliged for the correction and, while we can scarcely make a formal apology without implying that it is derogatory to a man's intelligence to hold an opinion different from that which we represent, we are gratified to note that both of the medical men in the Senate are in accord with the general professional sentiment. Their united influence will be a source of strength to the profession in its efforts to secure public recognition of the necessity of legislation in the interests of the public welfare.

INSTRUCTOR FOR MIRAJ MEDICAL SCHOOL. A teacher of physiology, chemistry, physics, biology and bacteriology is wanted. This school is maintained in connection with the Presbyterian Mission Hospital at Miraj, West India. Nearly 10,000 out patients and over 1700 indoor patients are treated and clinical experience will be afforded, though most of the appointee's time will be taken up with teaching. Traveling expenses, quarters at \$50 a month, are the perquisites, with opportunity for permanent service as a medical missionary. The applicant must be a Christian. Address Mr. Wilbert B. Smith, 600 Lexington Ave., New York City.

THE KIND OF VACCINATION ARGUMENT THAT COUNTS. Between Jan. 13 and Feb. 12 every member of the Penny Road School, near Dundee, Ill., who had not been vaccinated, developed smallpox. The cases included the teacher, her mother, and seven children. No child in the school who had been vaccinated nor any member of the families afflicted, similarly protected, contracted the disease. Authority, Chicago Board of Health. Anti-vaccinationists can not be convinced by general statistics of the before-and-after kind, nor by rehashes of fifty-year-old literature, nor by scientific arguments. Up-to-date reports of this kind, subject to investigation, supported by names and dates, with accurate statements of the fate of the unvaccinated and the escape of the vaccinated, will eventually convert all but fanatics.

MORTALITY OF PHYSICIANS. Various journals, quoting, with and without credit, the mortality statistics of the *Jour. of the A. M. A.*, are, we think, giving too favorable an idea of the longevity of physicians. In 1912, 2,120 physicians are known to have died in the U. S. and Canada. "Reckoning on a conservative estimate of 150,000 physicians," the mortality is 14.13 per thousand, the average for the previous decade having been 15.93. The average mortality for adults of corresponding age, that is 24 or 25 and upward, is about 21 per thousand and, while the medical profession is not a particularly hazardous occupation, and while its members have a theoretic knowledge of hygiene, it does not seem probable that the latter can be practically applied to effect a reduction of approximately a third in the death rate. Polk's Directory, which, if anything, errs in the direction of including men only nominally physicians or of retaining names after the removal of the men, gives a total of slightly less than 136,000 for the U. S. and Canada. On this basis, the mortality is increased to about 15.6. But we do not believe that the full mortality of the profession is, or can be, recorded, even by the most perfect system. We find a considerable number of deaths of retired physicians, especially of those who have left the profession for other lines of activity, quite accidentally, and this convinces us that a good many names escape the statistics altogether. There is a natural tendency for physicians who have retired, either from age or by entering other businesses, to lose touch with the profession, often to remove from their previous locations, where their decease would be noted by their colleagues. In business and social ways one encounters a surprising number of "reformed" physicians.

Ninety physicians died of violence, beside 36 suicides. Ten of the violent deaths resulted from automobiles.

HOSPITALS FOR INDIANS. The Committee on Indian Affairs of the United States Senate has approved an Indian appropriation bill providing for hospitals and other means for treating tuberculosis among the Indians. The appropriation amounts to \$307,000.

PURE WATER ON TRAINS. The Treasury Department issued from Washington on January 29 regulations prohibiting the supplying of any but "certified pure" water on trains and steamboats in interstate commerce. The regulations require further that all water containers be scalded at least once a week and that any ice used in cooling the water must also be "certified pure." The requirements of individual drinking cups on common carriers engaged in interstate commerce was made by the Public Health Service some time ago.

FOR MEDICAL RESEARCH. The faculty of medicine of the University of Toronto, Canada, has received an endowment fund for medical research, the income of which will probably amount to \$25,000 a year.

LEGISLATION AGAINST FEE-SPLITTING. An amendment to the Medical Practice Act of Missouri has been introduced by Woodward, which has for its purpose a legislative solution of the fee-splitting evil:

"Sec. 8319a. It shall be unlawful for any physician or surgeon to divide or offer to divide his fee or charge for performing any surgical operation with any other physician or physicians, surgeon or surgeons; and any physician or surgeon so offending, on conviction thereof, shall be fined in a sum not to exceed \$500, and such conviction shall operate as a revocation of his license to practice medicine and surgery."

COURSE OF CLINICAL LECTURES AND DEMONSTRATIONS in the out-patient hall of the New York Skin and Cancer Hospital on the following Wednesday afternoons at 4:15 o'clock on Surgical Diseases of the Skin: April 2, April 9, April 16, April 23, April 30, May 7, Dr. Bulkley. Surgical Treatment of Malignant Diseases: May 14, Dr. Bainbridge. Each lecture will be illustrated by cases, models, colored plates, photographs, etc.

SOCIETY MEETINGS.

THE AMERICAN ASSOCIATION OF ORIFICIAL SURGEONS will hold its spring clinic at Hering Medical College, Wood and York streets, Chicago, April 23-26.

I. C. I. CHAPTER OF NU SIGMA NU held an open meeting, to which the alumni were invited, at the Chapter House, 246 Elmwood Ave., Buffalo, March 3.

MEDICAL SOCIETY OF THE STATE OF NEW YORK. At the next meeting of the Medical Society of the State of New York, in Rochester, April 28 to May 1, it is planned to have an exhibit of scientific interest. Doctors in this vicinity are requested to loan exhibits of this nature. Each exhibit should be marked so that those viewing it would know whence it came, and the school and year of graduation of the practitioner. Communications may be addressed to Dr. Wesley T. Mulligan, Rochester, N. Y.

At the regular meeting of the Medical Union of Buffalo, held at the Statler Hotel, March 27, Dr. George Edward Fell gave an

illustrated paper on Ethmoiditis. Transverse and longitudinal sections of the skull were made and protographed by the author for projection. The method of operation known as the "Moshier" was illustrated and described in an interesting manner."

The regular meeting of the Medical Society of the County of Monroe was held at the rooms of the Rochester Academy of Medicine March 18. Subject of paper, "Intestinal and Lymphatic Chyle, With Special Reference to Clinical Aspects," Dr. A. L. Benedict, Buffalo.

Dr. Young reported that, with special reference to the meeting of the State Society, April 29-May 1, a circular letter had been sent to physicians west of the eastern line of Oneida County, urging them to become members of the State and County organizations. One thousand five hundred and twenty-three unaffiliated physicians were listed for this territory, the special field of this journal, 384 of whom were designated as homoeopaths or eclectics.

Memorial resolutions were adopted regarding Drs. Frank A. Jones and A. W. Bellam, recently deceased.

THE MEDICAL AND SURGICAL LEAGUE held its monthly meeting March 13. Dr. Robert Mehnert read a paper entitled, "Asthma." Dr. Alfred Noehren reported a case of sarcoma of the testicle upon which he had operated, but in which a metastasis later formed in the spinal canal giving rise to interesting symptoms.

THE UTICA MEDICAL LIBRARY ASSOCIATION is endeavoring to awaken renewed interest among its members by securing papers from men of prominence outside the society. The paper of the February meeting was a very excellent address on Cardiac Irregularities by Dr. W. D. Alsever of Syracuse, and was heard with much interest. After the paper and its discussion an Italian luncheon was served. At the March meeting the literary program was followed by a Mexican luncheon.

The promise of Hon. P. C. J. DeAngelis, Justice of Supreme Court, has been secured to deliver a paper before this Association at its April meeting on "The Medical Expert," or "Expert Testimony."

OUR CONTEMPORARIES.

Support of Medical Schools.

The question of adequate support for medical education for the next decade is a most far reaching and important one. Increased funds of varying amounts have been widely procured

for laboratories, hospital extensions, and for the promotion and full teaching and research. The Education Department of New York has taken advantage of this improvement to announce that in the near future it will cease to recognize schools employing less than six whole-time instructors. The department, furthermore, very wisely refuses to recognize nominal salaries as complying with its conditions. Naturally, in this general effort to procure more money in order to escape further criticism, waste inevitably occurs; many schools which would do better to emulate the example of those who have closed their doors struggle to imitate those that are destined to survive. Gifts and appropriations of \$5,000 and similar sums for improvements only enable weak establishments to maintain themselves a little longer. In no field of education today can wise giving do more than in medicine, but in no field does the intending giver need wiser discrimination.—Editorial in North Tonawanda News, March 11, 1913.

While we agree in the main with the above statement, it should be remembered that a gift of \$5,000 to an existing institution, of any kind, whose status and accomplishments can be investigated, will probably have as great efficiency as \$10,000—or perhaps \$50,000—comprising part of a large sum for the establishment of a new institution. It is no discredit to a medical school that it needs assistance. Under present conditions there is not a medical school in the country that exists or can exist on the basis of a business organization, that is, that can pay running expenses and interest on investment (unwatered) from the fees of students. The true philanthropist would do well to study the ratio of per capita cost of instruction to fees; to ask whether the institutions under consideration have done and are doing conscientious work; and, very frankly, to ask how far efficiency and how far glory enters into the motives of donor and executives.

The Canadian Journal of Med. and Surg. for March is copiously illustrated. The editor strongly favors the principle of British Liberty, objecting to certain arbitrary commands of school inspectors, as that a child be excluded from school because of the objection of the child, his family and his dentist, to having the entire set of deciduous teeth extracted; or until the tonsils have been extirpated, especially in a case in which they had already been removed. Personal liberty, by the way, used to be quite a hobby in the U. S.

The Medical Review of St. Louis has incorporated the *Medical Era*. The *Review* is one of our brightest exchanges, and we take pleasure in crediting its able management to a woman's intellect.

PERSONALS.

Dr. William J. Robinson was honored by a banquet, at which over 200 gathered, on March 7. The occasion was the tenth anniversary of the *Critic and Guide*. Dr. Jacobi, president of the A. M. A., presided. Various speakers, medical and otherwise, testified to Dr. Robinson's campaign against unethical products and for eugenics and better social conditions. In response, Dr. Robinson expressed especial gratification at the presence and good will of many who differed with him as to certain opinions.

Dr. Otto R. Eichel has resigned the position of superintendent of the J. N. Adam Memorial Hospital at Perrysburg and has been succeeded by Dr. Clarence L. Hyde of Buffalo, whose work in various anti-tuberculous movements, is well known. Dr. Horace L. Grasso, formerly of Buffalo, was eligible to the appointment by promotion, but preferred to confine himself to strictly medical service and not to assume executive duties.

Dr. E. M. Manwaren, of Buffalo, has recently undergone an operation.

Dr. Ludwig Aschoff, Professor of Pathology in the University of Freiburg, was the guest of the Buffalo Club on March 16, to meet the Academy of Medicine. Dr. Aschoff spoke fluently in English, without notes, describing his researches on thrombosis. He has promised our readers an abstract of his lecture. A supper was served.

Dr. Allan N. Moore of Lockport fractured his right ankle on March 3, slipping on an icy step.

Dr. E. G. Mease of Dunkirk returned from a southern trip early in March.

Dr. Leonard T. Walsh and Miss Elleen Lynch of Dunkirk were married in Buffalo March 3. They will reside in Denver.

Dr. Ulysses B. Stein of Buffalo sailed March 15 for Europe.

Dr. F. M. Boyle of Buffalo returned from Washington March 11.

Dr. Joseph Brennan, who has been in New York for over three years, has returned to his former home in Buffalo.

Dr. Duncan A. Carmichael, Senior Surgeon, U. S. Public Health Service, who has been in charge of the Buffalo station for seven years, has been ordered to Vineyard Haven, Mass.

Dr. E. M. Tracy of Lackawanna spent a week in New York, early in March.

Dr. Frederick Frisch of Atlantic City, formerly of Buffalo, sailed to Europe March 8.

Dr. C. W. Hennington of Rochester, our Associate Editor, has been seriously ill with influenza, the only definite lesion being an amygdalitis, but is now convalescent.

Dr. John T. Harris of Tonawanda has been appointed Postmaster.

Dr. Allen A. Jones of Buffalo spent part of March in Atlantic City.

Dr. H. H. Wing, Professor of Animal Husbandry at Cornell, and Dr. John R. Williams of Rochester, addressed the University of Buffalo in a symposium on the Increased Cost of Living. March 22; the former speaking on the cost of production and the latter on the waste in delivery under present methods.

OBITUARIES.

William Conrad Wile, N. Y. University, 1870, died in Danbury, Conn., February 21, aged 66. He was a Civil War veteran and was the editor of the New England Medical Monthly for many years.

Minot A. Steele, Albany, 1890, died in Newport, R. I., Feb. 17, from erysipelas following a dog bite. He was 45 years old.

Charles S. Brower, P. & S., Baltimore, 1880, died in Kingston, N. Y., December 15. He was a practitioner of Phoenicia, N. Y.

Albert V. D. Collier, Albany, 1866, died in Albany December 15, 1912, aged 75. He was a resident of Catskill.

Oscar Oldberg, Emeritus Dean of the Northwestern University School of Pharmacy, died February 27, in Pasadena. He was born in Sweden January 22, 1846. Having come to America

as Vice-Consul of Sweden in Memphis, he was appointed Chief Clerk and Medical Purveyor of the U. S. Marine Hospital (now Public Health) Service, in 1874. As Dean of the National College of Pharmacy in Washington, he introduced the metric system. For three decades he was an active member of the Committee of Revision of the U. S. Pharmacopoeia. Few men have done more to perfect the *Materia Medica*, and this country owes much to his sagacity and industry.

Albert J. Evans, Hahnemann of Philadelphia, 1871, died at Pasadena February 28, aged 68 (88 in other notices). He was credited to Lockport, N. Y., in Polk, but left that town for Fredonia about twenty years ago and left Fredonia for California, on account of failing health, several years ago.

George H. Witter, P. & S. of Baltimore, 1885, died at his home in Wellsville, February 12, aged 59.

Dr. John Shaw Billings died of pneumonia in New York March 11, aged 73. He was graduated in medicine from the Medical College of Ohio, Cincinnati, in 1860, entered the U. S. Army as Assistant Surgeon in 1862, and gained the rank of Lt.-Col. in 1894, being retired in 1895. His great work was the building up of the Army Medical Museum and the Index Catalogue. His accomplishments were recognized by honorary degrees in medicine from Munich and Dublin, D.C.L. by Oxford, and LL.D. by several universities.

Dr. Henry William Brown, Geneva Medical College, 1867, a surgeon of volunteers during the Civil War, died at Waterloo, Ia., Feb. 27, of organic heart disease, aged 68. (Note.—The Geneva Medical College existed from 1836 to 1872, when it was merged with the Medical Department of Syracuse. As Geneva contributed indirectly to the University of Buffalo, the University of Michigan and other extant colleges, and as there can be comparatively few of its graduates living, we would welcome a historic review of its work.)

Dr. Archibald McNiel Bevier, Buffalo 1866, for 45 years a practitioner of Owasco, N. Y., died at his home Feb. 19 of arterio-sclerosis, aged 71.

Dr. Hiram Dana Walker, Buffalo 1864, died at his home in Buffalo Feb. 21, aged 73. He was a member of the A. M. A. and its branches and of the Buffalo Academy of Medicine. For many years he had devoted his time to the study of cancer.

which he believed to be due to a parasite propagated by the earth-worm. While his theory was not generally accepted, all who knew him were impressed with his sincerity and with the amount of study which he had devoted to the subject. In scientific research, especially along lines having so practical and humanitarian interest, equal credit must be given to those whose labors have resulted negatively, especially in regard to subjects whose final solution has not been accomplished.

Dr. Ephraim Winnie of Hornell, University of Michigan 1857, died at Hornell, Feb. 19.

Dr. Frank Adelbert Jones of Rochester, Buffalo 1869, died at his home in Rochester, March 9. He was born in Charlotte, Oct. 23, 1849, his father, Dr. Ambrose Jones, being in practice there. He was the first to die of the members of the Dozen-and-one Club, composed of physicians and their wives and founded 29 years ago. After graduating in medicine he commenced practice in Rochester, but about 1871 moved to Grand Rapids. From 1874 to 1893 he practiced in Charlotte and then moved into the city. He was a Master Mason. He was a member of the A. M. A. and its branches, having been President of the Monroe County Society; he was also a member of the Rochester Academy of Medicine and Pathologic Society and the Central N. Y. Medical Association. He is survived by his widow, formerly Miss Elizabeth R. Wells, to whom he was married in 1869, and by one daughter, Miss Grace L. Jones. Dr. Jones was highly esteemed by his associates and was known as a hard worker, which perhaps accounts for his surprisingly youthful appearance.

Dr. Archibald Waite Bellamy died March 14, 1913, at the age of 44 years. He resided on the Ridge road in the Town of Irondequoit, and also maintained an office in the city of Rochester. He was born in Greenville County, Ontario, Canada, the son of John Bellamy; educated in the High School at Collingwood, Ontario; graduated from Queen's College, 1897, and immediately engaged in practice at Irondequoit. He remained unmarried and leaves a mother and brothers and sisters. He was a member of the A. M. A. and of the State and County Medical Societies. He was Health Officer of the Town of Irondequoit and a member of the Grange and of various fraternal organizations.

Dr. John R. Selover was born at Enfield, Tompkins Co., N. Y., Jan. 8, 1824. His family moved to Ohio, in wagons, while he was a boy, but returned after a few years to Trumansburg, N. Y., where he acquired a practical knowledge of tinsmithing, after

which he engaged in the hardware business in Prattsburg. He spent two years in California during the gold fever, returning to Prattsburg and studying dentistry with Dr. P. K. Stoddard. In 1874 he graduated in medicine from the University of Buffalo and, after an experience as surgeon to a Mexican mine, he finally settled in Trumansburg, continuing in the practice of medicine and dentistry till his death, Feb. 26, 1913, in his ninetieth year. He was well versed in astronomy and geology, and had acquired a fluent use of Spanish. He was a man of great native ability and highly esteemed by his associates and patients. His daughter, Marion, married the late Dr. E. H. Tweedy of Buffalo.

NEW INVENTIONS

Geo. H. Houghton, Albany, N. Y., Surgical Apparatus, No. 1,055,462.

Richard Blunk, Wesel, Germany, Surgical Tweezers, No. 1,053,149.

Edw. Bohlander, Pekin, Ill., Ankle-Joint for Artificial Limbs, No. 1,053,352.

C. W. Sillin, Stuttgart, Ark., Abdominospinal Support or Splint, No. 1,052,523.

Albert E. Stoll, Zollikon, Switzerland, Apparatus for Making Hydrogen Peroxide, No. 1,052,626.

E. F. Petersen, Frankfort-on-the-Main, Germany, Pessary, No. 1,052,687.

Wm. W. Evans, Hamilton, Va., Dental Instrument, No. 1,052,806.

Chas. J. Greenstreet, Indianapolis, Ind., Process of Making Nitrogenous Compounds, No. 1,052,815.

A. J. Curlee, Waxahachie, Tex., Impregnator, No. 1,052,895.

Geo. Zitzmann, West Hoboken, N. J., and Frank Shoreys, New York, N. Y., Bottle Label, No. 1,052,991.

Mattie E. Siebert, Spokane, Wash., Catamenial Sack, No. 1,053,069.

Albert Wolff, Cologne, Germany, Process for Preparation of Formates of Chromium Aluminium and Iron, No. 1,054,735.

Harry Spirs, San Francisco, Cal., Instruments used for Aiagnostic Purposes in Obsterical Practice, No. 1,054,802.

Charles L. Allen, Salt Lake City, Utah, and Samuel C. Miles, Price, Utah, Hair Drying Apparatus, No. 1,054,813.

F. J. Suchanek, New York, N. Y., Hydrothermometer, No. 1,054,879.

Q. E. Packard, Montreal, Quebec, Canada, Bunion Protector. No. 1,054,934.

William B. Wilcox, Ypsilanti, Mich., Crutch Tip, No. 1,055,111.

Charles F. Hyde, Chicago, Ill., Medicine Dropper. No. 1,055,180.

Julius I. Klepper, New York, N. Y., Syringe, No. 1,055,188.

Benjamin Seacombe, Pendleton, near Manchester, England, assignor to Thompson & Capper, Manchester, England, Magneto-Electric Massaging Machine, No. 1,055,236.

Jesse G. Grantham, Jacksonville, Ill., Poison Indicating Bottle, No. 1,055,268.

BOOK REVIEWS

42d ANNUAL REPORT OF THE BUFFALO STATE HOSPITAL for the year ending September 30, 1912. This is an interesting document, both from the economic, sociologic and medical standpoints. The following extracts seem to us most important from the former, on account of their bearing on problems under active discussion:

Schedule of discharges by percentages for the year ending September 30, 1912:

Percentage of recoveries to total admissions.....	24.60
Percentage of recoveries to new admissions.....	31.71
Percentage of recoveries to average population.....	4.60
Percentage of recoveries to number discharged.....	26.76
Percentage of recoveries to number discharged, exclusive of deaths, inebriates and transfers.....	45.96

Percentage of recoveries to new admissions, excluding inebriates and drug habitues.....	32.04
Percentage of recoveries to all admissions excluding inebriates, drug habitues and transfers.....	26.53
Percentage of deaths to average population.....	6.42
Percentage of deaths to whole number treated.....	5.53

Average purchase price and annual per capita cost of staple articles of consumption:

	Average purchase price	Annual per capita cost
Fresh meats, per pound.....	\$0.089	\$15.76
Poultry, per pound.....	.172	.56
Wheat flour, per barrel.....	4.33	5.33
Butter, per pound.....	.268	9.515
Cheese, per pound.....	.139	.947
Eggs, per dozen.....	.256	4.542
Tea, per pound.....	.154	.726
Coffee, per pound.....	.183	1.95
Sugar, per hundred weight.....	5.40	2.95
Milk (fresh), per gallon.....	.158	8.297
Total for food.....		50.37
Liquor, per gallon.....	1.918	.076
Coal, per ton.....	1.826	13.00

It should be explained that fresh vegetables and fruits are mostly raised on the hospital grounds. The total actual cost per patient is stated at \$202.55 (not counting interest on investment, which is, of course, free from taxation.) The total number of physicians is 11, 1:117 patients, and the salaries of the medical officers represent an average expense of \$9 a year per patient. Considering that this includes about 125 major operations and that the average daily number of patients confined to bed was 125, it indicates a degree of economy which should be impressed upon the public. Dr. Hurd and his staff are to be congratulated on the efficiency of the management.

CHLORIDE OF LIME IN SANITATION. Albert H. Hooker, Technical Director of Hooker Electro-Chemical Co., Niagara Falls, N. Y., published by John Wiley & Sons, N. Y.; 231 pages. No price stated.

While the avowed purpose of this book is to call attention to the efficiency and economy of chloride of lime as a disinfectant, it contains a vast amount of information collected in a careful, scientific study of the subject, including many excursions into allied topics. The statistics of the bulk of sewage, of infant mortality, the bacteriologic tests of water and sewage before and

after treatment, the economics of typhoid fever are a few of the details considered. For the sanitary engineer and the physician interested in hygiene, it is invaluable. We especially commend the broadmindedness of the Company in enabling the author to give full scope to his own originality and aptitude for literary research.

PROCEEDINGS OF THE CANAL ZONE MEDICAL ASSOCIATION for the half year, April-September, 1911. Vol. 4, Part 1.

This is an interesting collection of papers, including several on protozoic diseases.

TRANSACTIONS OF THE EIGHTEENTH ANNUAL MEETING OF THE AMERICAN LARYNGOLOGICAL RHINOLOGICAL AND OTOLOGICAL SOCIETY, 1912, including the meetings of the four geographic sections during the year; 524 pages, besides index; illustrated.

The inclusion of papers on oesophageal diverticulum, the Wassermann reaction, the hypophysis, infections of the meninges, etc., indicates the broad range of this specialty. It is impossible to do justice to the various authors and we will single none out for special mention. The Secretary, Dr. Thomas J. Harris of Philadelphia, is collating and preparing the matter for publication, has performed a large and difficult task with great credit.

DISEASES OF THE STOMACH AND UPPER ALIMENTARY TRACT. Anthony Rassler, M. D., New York; published by the F. A. Davis Co., Philadelphia; 870 pages, 75 full-page plates, several in color, and over 100 other illustrations; \$6.00.

While the author has wisely followed the customary arrangement of such books, one notes a great deal of original matter. Without exaggerating its importance, many excellent X-ray pictures illustrate this method of locating the stomach, foreign bodies, etc. The chemistry of the saliva, gas formation in the stomach, duodenal ulcer, an elaboration of the editor's centrifuge test for indican (approximately quantitative), dietetic standards, are selected at random from the many details included in this work and usually omitted. Unlike the majority of perfunctory writers on gastric analysis, Bassler describes properly the end-point of the test by dimethyl for HCl , but it seems to us that his acceptance of the alizarin test for combined HCl should be replaced with scepticism. It is questionable, also, whether credit should be given to anyone in particular for the simple test for lactic acid with uncolored solutions of ferric chlorid. The chart to show graphically the relative locational frequency of gastric ulcer is very instructive. One is impressed throughout the work, with the critical and practical standpoint from which the various details are discussed—an attitude only reached by one

with a large experience and a keen and logical intellect. It is this quality of authorship which lends value to a book and especially to one entering a field already occupied, or to one in which differences of individual opinion often arise. Dr. Bassler is well known to our readers, both by general reputation and by his recent contribution to the *JOURNAL*, and they will join with us in extending to him hearty congratulations for his latest literary production.

CONTRIBUTION TO THE SURGERY OF BONES, JOINTS AND TENDONS. John B. Murphy, A. M., M. D., LL. D., Chicago. Reprint from the *Journal of the A. M. A.* 71 pages, 167 illustrations.

The very modest title and the paper binding of this reprint are out of all proportion to its merit. Except that the reader is not delayed by a discussion of generally accepted dicta and that actual cases are employed to a considerable degree to develop the argument, this monograph is a very complete presentation of the division of surgery mentioned, rather than a contribution, in the usual sense. It is, however, in another sense, a contribution by this distinguished surgeon to the members of the great national organization which has recently honored him as well as themselves, by an election to the presidency. At the risk of appearing sordid, and solely to impress upon our readers the practical value of supporting professional organization, quite apart from the general advantages of professional solidarity, we take the liberty to point out that, as ordinarily printed, this monograph is equivalent to a 150-page book, fully illustrated, whose regular price would be about \$1.50. This is only one of the many valuable returns made by the A. M. A. to its members. Instead of a little over 30,000 members, this organization should have 100,000. Membership is not only a professional duty, but a matter of self-interest of the most practical kind.

TEXT BOOK OF OPHTHALMOLOGY, by Dr. Paul Roemer of Griefswald, translated by Dr. M. L. Foster, published by the Rebman Co., 1123 Broadway, N. Y. Vol. 3, pages 573 to 876; 186 illustrations and 13 colored plates for this volume. \$2.50 per volume.

We have already spoken in the highest terms of the first two volumes. The present concludes the series, following the same clinical style as made the first two volumes so lucid and practically valuable. The present edition is being rapidly exhausted and it is announced that the next edition will be in a single volume.

DENTISTS' DIARY, 1913, published by Lehn & Fink, N. Y.

This is a very convenient account book, suitable for dentists or physicians having an exclusive office practice, the book being

too large for the pocket. The page margins contain excerpts from dental literature. The publishers have complimented the editor by several quotations from papers on borderland medico-dental subjects, which are acknowledged with thanks.

STEUBEN SANITARIUM ANNOUNCEMENT.

This is a neat pamphlet by the Superintendent, Dr. J. E. Walker, and the Assistant Superintendent, Dr. H. R. Carson, giving information as to the equipment, location and purposes of this excellent institution.

GOVERNOR SULZER'S MESSAGE ON PUBLIC HEALTH WITH REPORT OF SPECIAL PUBLIC HEALTH COMMISSION. Transmitted to the Legislature February 19, 1913.

It is a favorable indication that the Governor appointed this commission within ten days of his assumption of office and that his message consists in a brief endorsement of the data and legislation recommended by the Commission. An executive so thoroughly imbued with the importance of prompt and efficient action on this important subject and so modest and generous in giving all credit to the Commission—which served without pay except for clerical assistance—inspires confidence.

MUSCLE TRAINING IN THE TREATMENT OF INFANTILE PARALYSIS. Boston Normal School of Gymnastics, 1905. Reprinted from *The Boston Medical and Surgical Journal*, Vol. CLXVII, No. 17; pp. 567-574; Oct. 24, 1912. Price, 25 cents. W. M. Leonard, Publisher, 101 Tremont Street, Boston, Mass.

The demand for light upon this subject exhausted the file of the *Journal* in which it was printed and has led Dr. R. W. Lovett and the *Medical Journal* to re-issue the article in form of a thirty-two page reprint at the nominal price of twenty-five cents. The directions given are explicit and make the reprint not only of great value, but practically the only set of definite directions in the treatment by exercise of conditions following paralysis.

AN INTRODUCTION TO CHEMICAL ANALYSIS, for Students of Medicine, Pharmacy and Dentistry, by Elbert W. Rockwood, M. D., Ph. D., head of the Dept. of Chemistry of the University of Iowa; 4th edition; 246 pages; 20 illustrations. P. Blakiston & Co., Philadelphia, \$1.50.

While it should be understood that this makes no pretension of being a treatise on chemic theory nor of covering physiologic chemistry, as practised by the clinician, it is an excellent introduction, giving the student facility in both qualitative and quantitative analysis and affording a basis on which more technically medical analysis may be developed.

PRACTICAL MEDICINE SERIES, 1912, VOL. 8. The series is under general editorial charge of Drs. Gustavus P. Head and Charles L. Mix of edited by Dr. George F. Butler; Preventive Medicine by Dr. Henry B. Chicago. This volume includes Materia Medica and Therapeutics. Favill; Climatology by Dr. Norman Bridge of Los Angeles. Published by the Year Book Publishers, Chicago. Price for the volume, \$1.50; for the series of ten, \$10.00.

As stated for the other volumes of the series, the present having been received out of its turn, this series is an excellent review of periodical literature, all the better because the editors compile from other writings instead of presenting their personal views. Hormonal, Carbon Dioxid Snow, Limonene, Salvarsan and Neosalvarsan, Maps showing distribution of Plague, Deforestation are some of the noteworthy topics discussed.

TRANSACTIONS OF THE AMERICAN ASSOCIATION OF GENITO-URINARY SURGEONS, 1912; 315 pages, illustrated, paper cover, published for the Association by F. H. Hitchcock, 105 W. 40 St., N. Y.

The list of members includes only one in our special territory: Dr. Ruggles of Rochester. It is obviously impossible to review adequately, a considerable mass of papers on various subjects and we dislike, in such cases, to single out individual papers. The collection is a most valuable one.

MEN, MANNERS AND MEDICINE, by Medicus Peregrinus. Octavo, paper cover; 98 pages; \$1.00; published by W. M. Leonard, Boston.

This is an interesting collection of essays and sketches which have appeared in the *Boston Medical and Surgical Journal*. They represent a type of scholarship rare in these pragmatic times, and reminding one somewhat of Oliver Wendell Holmes's prose.

NAPOLEON'S CAMPAIGN IN RUSSIA, ANNO 1812, by Dr. A. Rose of New York, published by the author. About 200 pages, with illustrations by O. Merte; \$1.50.

This is not exclusively a medical consideration of the campaign, though, naturally, the author has emphasized the professional aspects of it more than an ordinary historian would have done. Dr. Rose is not only a practical physician but known for his scholarly researches, especially in Greek. The study of history furnishes many lessons applicable to daily life and affords more interesting diversion than most fiction. We commend this work to those of similar tastes.

PROGRESSIVE MEDICINE, March 1, 1913. Quarterly, \$6.00 per annum; published by Lea & Febiger.

The present volume contains Surgery of the Head, Neck and Thorax, by Charles H. Frazier; Infectious Diseases, by John Ruhräh; Diseases of Children, by Floyd M. Crandall; Rhinology

and Laryngology, by George B. Wood; Otology, by Arthur B. Duel. The review of recent study of the hypophysis, the cure of 500 cases of Yaws by salvarsan and the study of measles in monkeys are especially interesting. The customary high standard is maintained.

TREATMENT OF DISEASE IN CHILDREN, by A. Sutherland, reviewed in March, page 497, is supplied through the American branch of the Oxford University Press, 35 W. 32d St., New York. Our statement that it was "published as above" was correct as we wrote it but was rendered incorrect by a shifting of position by the printer.

DISEASES OF WOMEN: Thomas George Stevens, M. D., B. S., F. R. C. S., M. R. C. P., London. University of London Press (Oxford University Press, American Branch, 35 W. 32, N. Y.); 431 pages, 202 illustrations, \$5.50.

This is a systematic treatise, well presented and well brought out by the publishers.

PSYCHANALYSIS: Its Theories and Practical Application. By A. A. Brill, Ph. B., M. D., Chief of the Neurological Department of the Bronx Hospital and Dispensary; Clinical Assistant in Psychiatry and Neurology at Columbia University Medical School. Octave of 337 pages. Philadelphia and London: W. B. Saunders Company, 1912. Cloth. \$3.00 net.

It is rather difficult for one engaged in the more pragmatic medical problems to enter with a sympathetic spirit into the realm of psychanalysis. For example, while a dream may be interpreted in a far-fetched way to indicate some concealed or even unrealized obsession, fear or suspicion or desire of the patient, ordinary dreams seem rather to depend upon external stimuli and, even in their bizarre elaborations of these stimuli, to express ideas derived from reading or conversation rather than subjective tendencies. Possibly there is a distinct cleavage between the dreams of normal and of abnormal persons in this regard. A book of this kind necessarily deals with the lowest forms of human depravity and, for this reason, it does not make pleasant reading, but it must be remembered that the close analysis of the various aprosychoses (if it be permitted to coin a technical term for foul-mindedness) is a necessary step toward their relief. It certainly does not become one who examines intestinal excrement to scorn the man who analyzes mental excrement.

PRINCIPLES AND PRACTICE OF OBSTETRICS. By Joseph B. De Lee, A. M., M. D. Professor of Obstetrics at the Northwestern University Medical School. Large Octavo of 1060 pages, with 913 illustrations, 150 of them in colors. Philadelphia and London: W. B. Saunders Company, 1913. Cloth, \$8.00 net; Half Morocco, \$9.50.

This is a magnificent work, entering into almost every conceivable detail. There is nothing novel in the arrangement nor in the author's aspirations. Obviously, there can be little that is strictly original in so well established a branch of medical practice. It is the masterly thoroughness of the author, illustrator and publisher, that is impressive.

ABSTRACTS.

CURABILITY OF TABES BY EHRLICH'S SALVARSAN AND NEOSALVARSAN. Leredde, *Society of Medicine of Paris*, February 7, 1913. After discussing a large series of cases, the author reaches the following conclusions, no one dissenting, except as to the propriety of the word *cure*. Tabes is not an entity but a syndrome and the termination of a syphilitic meningitis, extending to the roots and posterior bands of the spinal cord. The curability by mercury is certain in the sense of rendering a positive reaction negative. But, especially from the practical symptomatic side, salvarsan or, rather, neosalvarsan, should replace mercury, as its action is more rapid and more certain. The dosage should be 1 centigram of salvarsan or 1½ centigrams of neosalvarsan per kilo of body weight, three or four doses are given, checked by Wassermann reaction, at intervals of a month. In quite a number of cases, larger doses were given after the initial dose. He considers Herxheimer's reaction as an indication of a normal response to treatment and declares that unfavorable results have always been due to too large dose, faulty technic or too short intervals of treatment.

OYSTERS AND TYPHOID IN PARIS. Paul Vincey, *Society of Medicine of Paris*, February 7, 1913. For the period of 1906-1910, the average mortality per annum has been 9.2 per 100,000 population. Analysed, the mortality was 9.6 for males, 8.8 for females. It was less than 2 per 100,000 of the ages beyond 60, except a rise after 80, which is not significant on account of the small number of persons of advanced ages. The highest rate was for males of about 25, 20.2 per 100,000 of this age. In 1911, owing to the failure of the spring water normally supplied for domestic purposes and the use of Seine water (which is not bad according to American standards) the mortality was doubled. (Note—Typhoid is rarely seen in Paris hospitals, and about half the cases come from the suburbs which have a

comparatively small population. Ed.) The author then compares the seasonal mortality with statistics of importation of oysters into the city. The latter are about as for American cities, practically nil for May-August, rising rapidly to a December maximum and dropping to about a third for January and February. The mortality rates for the same period (1906-10) were 13 for June and August (per 100,000 population), 19 for July and December, 20-25 for the other months. The morbidity rates were 122 for June, 126 for August, 132 for July, and varied from 131 to 205 for the other months. The average mortality was 21 and morbidity 159, indicating a nearly perfect reporting of cases. While in America, one would be inclined to ascribe the seasonal variations to greater tendency to drinking impure water, the author concludes that about a quarter of the deaths from typhoid in Paris are due to oysters. The objections to his conclusions were freely voiced in the discussion.

DETERMINATION OF FUNCTIONAL ACTIVITY OF LIVER AS INDICATED BY THE PRESENCE OF UROBILINOGEN IN THE URINE.—Allan Eustis, B. S., Ph. B., M. D., New Orleans *Medical and Surgical Journal*, December, 1912. While investigating several aniline dyes, Paul Ehrlich found that when an acid solution of paradimethylamidobenzylaldehyde was added to certain urines a bright red color was produced (*Munch Med. Woch.*, No. 15, 1901). Pappenheim (*Berliner Klinih Woch.*, No. 2, 1903), called attention to the occurrence of this reaction for urobilin, and Neubauer, the same year, demonstrated that the reaction is due to urobilingen, a colorless chromogen occurring in certain pathologic urines, attention to which was first called by Sallet (*Rev. de Med.*, No. 2, 1897), Richard Bauer (*Centralblatt fur innere Med.*, No. 34, 1905) proved that the reaction is due to urobilingen, and as far as I can ascertain he was the first to call attention to its clinical significance. Bilirubin, as shown by Beck, Bauer and Fr. Muller, is reduced in the intestines to urobilingen, which in turn is reabsorbed by the portal circulation and transformed by the liver cells again into bilirubin, to be again excreted into the intestines as bilirubin in the bile. On exposure to air and light, urobilinogen is oxidized to urobilin, and the presence of urobilin is taken by some as an index of hepatic function.

The reaction is performed as follows: To ten cubic centimeters of freshly passed urine is added two or three drops of a solution of four Grs. of paradimethylamidobenzylaldehyde in 200 c. c. of 20 per cent. hydrochloric acid. In the presence of urobilinogen a scarlet red color is imparted to the urine, which persists on dilution with water. The red solution gives a definite absorption band in the spectrum in the orange-red between D.

and E., so that with the spectroscope one can detect very minute quantities of urobilinogen in the urine.

For clinical purposes, contrary to the opinion expressed by Sahli, I think the spectroscopic examination is not essential, as a little experience with urines in which it is strongly positive allows one to recognize the red color at once.

I have also observed that, while urines in which there is no urobilinogen may give a reddish color (due to pyrrol derivatives) on the addition of the reagent, on diluting with water the reddish tinge changes to yellow, while those urines giving a *positive* aldehyde reaction change to pink, the color persisting up to a very high dilution.

Beck demonstrated that urobilin is a normal constituent of dog's bile, but that if a biliary fistula is produced so that no bile can enter the intestines the urobilin in the bile gradually diminishes and finally disappears altogether, to reappear in the bile again when the animal is fed his own bile obtained from the fistula.

According to Bauer, if the common bile duct of a dog is ligated, in three hours the urine will give a positive aldehyde reaction; on the second day the urine will show the presence of bile pigments and still give the aldehyde reaction; on the third day there will be a very strong reaction for pigments, but only a slight aldehyde reaction, while on the fourth day there will still be a strong pigment reaction, but no aldehyde reaction. On feeding ox bile to the dog the aldehyde reaction will reappear.

What are the clinical points to be derived from these experiments? (1) The presence of the aldehyde reaction in the urine denotes lack of liver function, cirrhosis, carcinoma, etc., the degree of loss of function being denoted by the intensity of the reaction. (2) In a case of icterus from occlusion of the common duct, in which there has been an absence of the aldehyde reaction, if this suddenly reappears it denotes a reappearance of bile in the intestines or an overcoming of the obstruction. (3) In cases of diagnosed cholelithiasis in which for some reason operation is deferred, and in which the aldehyde reaction has been present, but has disappeared, and persists negative for several days, immediate operation is indicated to overcome the obstruction.

These facts have all been proved clinically by Muller, Bauer, Neubauer, Hilderbrandt and others.

Below are tabulated the results of 363 cases in which the reaction was used, and in which a positive reaction was obtained in only those cases where there was evidence of interference with liver function:

DISEASE.	No. CASES OBSERVED.	ALDEHYDE REACTION.	
		No. Pos.	No. Neg.
Abscess of liver (amebic).....	2	1	1
Acute bronchitis.....	10	0	10
Acute catarrhal jaundice.....	4	2	2
Acute diarrhea.....	15	2	13
Acute parotitis.....	15	0	15
Alimentary glycosuria.....	5	2	3
Aneurism (thoracic).....	4	2	2
Amebic dysentery.....	2	0	2
Appendicitis (acute).....	3	0	3
Appendicitis (chronic).....	2	0	2
Arteriosclerosis	39	25	14
Arthritis deformans.....	4	1	3
Banti's disease.....	2	0	2
Cholethiasis (common duct).....	2	2	0
Cholethiasis (simple cystic).....	2	0	2
Chronic gonorrhea.....	5	0	5
Chronic intestinal toxemia.....	45	10	35
Chronic passive congestion of liver (cardiac disease).....	4	4	0
Chronic valvular heart disease....	59	4	55
Cirrhosis of liver (alcoholic).....	6	6	0
Cystitis	5	0	5
Diabetes mellitus.....	8	2	6
Eczema	2	0	2
Erythema multiforme.....	2	0	2
Exophthalmic goitre.....	3	0	3
Malaria fever, tertian.....	6	2	4
Myxedema	1	0	1
Nephritis, chronic parenchymatous	3	0	3
Nephritis, chronic interstitial.....	10	5	5
Peritonitis, tubercular.....	2	0	2
Pernicious anemia.....	1	0	1
Pneumonia, lobar.....	2	0	2
Pneumonia, lobular.....	3	0	3
Rheumatism, acute articular.....	2	0	2
Rheumatoid arthritis.....	9	3	6
Scarlatina	2	0	2
Syphilis, primary.....	3	0	3
Syphilis, secondary.....	5	2	3
Syphilis, tertiary.....	15	6	9
Tinea circinata.....	3	0	3
Tinea saginata.....	2	0	2

Typhoid fever.....	4	0	4
Tonsilitis, acute follicular.....	4	0	4
Tuberculosis, pulmonary.....	20	2	18
Ulcer of stomach.....	3	0	3
Uncinariasis	8	2	6
Urticaria	3	2	1
Vincent's angina.....	2	0	2
	363	87	276

DEXTROSE TO PROMOTE GRANULATION OF WOUNDS. Alex. Cocherel, *Gaz. des Practiciens*, January 15, 1913, employs 40 per cent. solutions in normal salt and also a dry powder. The action is marked in fresh aseptic and old cicatrizing wounds, but is not manifest in septic wounds until the bacterial process has been overcome by repeated washing with sterile salt solution or even antiseptics. Oiled silk dressings are used over the powder. How he obtains a dry powdered glucose is not explained.

EFFECTS OF PROLONGED IRRADIATION (BY X-RAYS) OF THE ABDOMEN. Regaud, Nogier and Lacassagne, *Arch. d'Elect. Med.*, October 11, 1912, report experiments, mainly on dogs, with protocols, illustrations of pathologic histology, etc. Applications of an hour or two in duration, rather constantly caused death in one or a few days. The rays were filtered so as to avoid their being too much absorbed by the skin and abdominal wall. They found that the superficial gastric epithelium was not very sensitive, neither were the pyloric glands but the glands of the fundus showed atrophy, especially of the chief cells. The intestinal villi were denuded at their tips and the crypts of Lieberkühn showed even more extensive necrobiosis and absorption of cells. The lymphoid and connective tissues were not particularly affected. A difference of degree was noted according to the distance of loops of intestine from the radiant source. The various lesions predispose to perforation. They call attention to the special danger of filtered rays from powerful tubes, the point of danger being shifted from the superficial to the visceral structures. Therapeutic applications, as in cancer, and the accidental exposure of operators, extending over a long period, they consider especially dangerous.

ABSENCE OF VAGINA AND RECONSTRUCTION. Ernest F. Tucker of Portland, Ore., *N. W. Medicine*, January, 1913. The girl, aged 22, had been born with an imperforate anus operated upon immediately. On operation, a rudimentary uterus with normal right tube and ovary were found, accounting for the menstrual

molimina. The vagina was successfully constructed from a loop of ileum.

SECOND OPERATION FOR EXTRA-UTERINE PREGNANCY.—Stuart McGuire of Richmond, *Old Dominion Journal*, January, 1913, in a series of 35 cases, had five requiring a second operation, six that bore normal children, the remainder not being traceable. Richard R. Smith of Grand Rapids tabulated 2,998 cases of operation for ectopic gestation with recurrence in 113— $3\frac{7}{8}\%$. Three of Smith's 30 personal cases subsequently bore children normally. In discussing the difficult problem of radical operation, sterilizing the patient, McGuire sagely remarks that all of the women who had a repetition of the ectopic pregnancy favored it and all who had borne normal children disapproved, and he emphasizes that the patient before operation is not in a position to judge correctly. The operator must therefore decide according to social conditions, as age, desire for offspring, number of previous children, and also with regard to the pathologic states encountered.

ENORMOUS HYDROCELE. H. G. Henrikson of New Market, Minn., *Am. Jour. of Clin. Med.*, Dec., 1912, reports a case in a man of 75, so large that when the tumor was first exposed he thought it was the abdomen, the penis lying in a dimple that resembled the umbilicus. About a gallon of liquid was removed, without injection of carbolic acid or other substance to prevent reaccumulation, but there has been no recurrence. Van Buren & Keyes record a hydrocele containing two quarts, and Dujat of Calcutta eighteen cases varying from 50 to 120 ounces.

GENERAL ANAESTHESIA BY INTRAVENOUS INJECTION OF ETHER-SALT SOLUTION.—L. W. Jenkins, Portland, Ore., *N. Y. Med.*, Dec., 1912. A saturated (7%) solution of ether in sterile physiologic salt solution is used, at body temperature. Allowing for evaporation, the solution actually contains about 5% of ether as injected. The stimulant stage begins when 25 c.c. have been injected, is not violent, and full narcosis is secured when 250-500 c.c. have been used. The average operation requires about 1-1½ liters for an hour, little more for two hours, the maximum employed being two liters, without untoward effect. Infection, embolism, overdistention of vessels and haemolysis are possible dangers but easily avoided. A rather complicated apparatus is illustrated by the author. The chief advantages are avoidance of disagreeable symptoms during the stimulant stage, mucous secretion and post-anaesthetic vomiting; and convenience and diminished risk of sepsis by eliminating the anaesthesia apparatus and administrator in head and neck operations. The anaesthetic is readily controlled, small amounts are used and the method has given good practical results.

CAMMIDGE REACTION.—Libertini, *Riv. Crit. di Clin. Med.*, VTVB, No. 13, page 161. To test Schlumm and Hegler's statement that the C reaction was due to glucose, he checked the examinations by using both unfermented and fermented urines. In 50 persons a positive reaction was obtained in 37 before and in 33 after fermentation. A positive test was obtained in six out of 10 healthy persons and in 27 out of 36 diseases in which there was no clinical evidence of pancreatic lesion. He considers the test of no value.

OCCULT BLOOD IN URINE. Leed, *Medizinische Klinik*, Berlin, filters a large quantity of urine and applies the test to the residue in the filter. Naturally, this concentrates whatever corpuscles may be present. The mixture is heated to destroy ferments which might produce a reaction similar to that of haemoglobin. (Note—We recall "losing a job" in our early experience because we would not report categorically yes or no regarding the presence of blood in urine. We had found by experiment that a few drops of blood added to 500 c.c. of urine would not give a reaction with guaiac and that the red cells could not always be found microscopically after such an addition. It should be remarked, however, regarding Leed's suggestion, which is not a novel one, that it is often desirable to know whether haemoglobin has been diffused into the filtrate or not, and that red cells can also be found by the microscope, about as readily as the guaiac test can be obtained from the residue. Heating to prevent pseudo-reactions is applicable to faeces, stomach contents, etc., although, without this precaution, a blood test is not found in the absence of blood unless a very delicate test is employed. and, for clinical purposes, a very delicate test is usually undesirable. A further caution is necessary. As is well known, the blue color with guaiac gradually develops even in the absence of blood and a general rule is to pay no attention to a reaction delayed more than a minute. In fact, if any appreciable quantity even of occult blood is present, the reaction is practically instantaneous. Heat hastens the appearance of the final reaction and false impressions may be obtained unless the investigandum, heated to kill ferments, is subsequently cooled before testing for haemoglobin. And, by the way, the phenolphthalin reaction is more convenient and is said to be more reliable than that by guaiac. Aloin, benzydene, etc., seem to have no advantage over guaiac.—Ed.)

VENERAL PROPHYLAXIS POST HOC.—Col. L. Marvin Maus, U. S. A., *Prov. Med. Jour.*, Jan., 1913, in a general article, includes interesting statistics as to chemic prophylaxis after exposure. The fact that a considerable number of exposures were

deliberately experimental, will delight the antivivisectionists, who claim that animal experimentation is the indication of a species of perversion whose acme is attained by experiment on the human being. The following table shows the results of the author on sixteen volunteers, shown to be gonococcus-free, inoculated with pus shown to contain gonococci:

Group	Formula	Time after Inoculation	Results
1.	Argyrol, 20% ; calomel, 33% ; fatty base of ointment, 47%	10 minutes	Successful
2.	Protargal, 2% ; calomel, 33% ; fatty base of ointment, 65%	15 minutes	Successful
3.	Thymol, 5% ; calomel, 33% ; fatty base of ointment, 62%	20 minutes	Successful
4.	Phenol, 3% ; calomel, 33 % ; fatty base of ointment, 64%	20 minutes	Successful
5.	Hyco, 2% ; calomel, 33% ; fatty base of ointment, 65%	25 minutes	Successful
6.	Calomel, 33% ; fatty base of ointment, 67%	25 minutes	Successful
7.	Calomel, 25% ; fatty base of ointment, 75%	30 minutes	Successful
8.	Calomel, 20% ; fatty base of ointment, 67½%	25 minutes	Successful

Dr. Gustave M. Blech of Chicago confirmed my experiments on sixteen volunteer Greeks and Italians at the time patients at Lincoln Hospital in that city. He employed the same technique in regard to the examinations of urethral scrapings and gonorrheal pus in order to satisfy himself that the men were free from infection at date of experiment and that the pus used in the inoculations was gonorrheal.

Collapsible tubes filled with 4 c. c. of calomel ointment (1-3 strength) were issued to 1200 regulars at a military tournament at Chicago. No new cases developed among those using the prophylactic. In September, 1910, a similar observation was carried out, 594 men, with 1301 exposures, using the prophylactic developed no new infection. Among 302 men, with 763 exposures, who neglected the prophylactic, there developed 26 cases of gonorrhoea, 12 of chancroid and 1 of syphilis. Various other corroboratory notes are added. (Note.—We believe nobody will accuse us of being an anti—or order his subscription stopped, if we state plainly that we do not approve of deliberate experiment of this sort on human beings. The fact that the subjects of experiment were volunteers does not alter this view. One of the cardinal functions of the medical profession is to avoid risks and to protect human beings against their own lack of caution. Of

course, the successful result of the experiment affords very valuable and scientific information, but of equal value would be a failure, and we doubt very much whether investigators would dare to report unsuccessful cases.—Ed.)

THE CLINICAL VALUE OF THE GONORRHEA COMPLEMENT FIXATION TEST. Victor D. Lespinasse, M. D., and Maurice Wolff, M. D., Chicago. *Illinois Medical Journal*, Jan., 1913—These antibodies persist in the blood as long as there are any live gonococci present in the body; just how long they remain in the bloodstream after the death of the last gonococcus is not definitely known, but they probably do not persist very long. We have some work in progress at present to determine this point. In our series of cases of individuals with gonorrheal history, cited below, there is not a single positive reaction occurring after two years. This fact bears out Keyes' work in the persistency of the gonococcus in the urethra. According to the conclusion of Keyes, the gonococcus rarely if ever persists in the urethra longer than 18 months. According to the gonorrhea complement fixation test, the antibodies can be present at least for two years.

The 25 cases headed "No gonorrheal history" are children and individuals who can be relied on to give honest statements.

Case.	No. of Cases.	Positives.	Pct.	Negatives.	Pct.
No gonorrheal history.....	25	0	0	25	100

All the following cases were clinically well with the following gonorrheal history:

1 year.....	12	3	25	9	75
2 years.....	9	1	11	8	89
3 years.....	8				
4 years.....	2				
5 years.....	10				
6 years.....	2				
7 years.....	3				
8 years.....	6				
9 years.....	4				
10 years.....	12				

All negatives.

All negatives.

In contra-distinction to the Wassermann test, which will become negative with mercurial or salvarsan treatment, there is no treatment that will render the gonorrhea complement fixation test negative. But there is a method of treatment that will render any one positive to the gonorrhea complement fixation test, whether he has a gonorrhea or not, namely: the injection of gonorrhea vaccines. Therefore, in cases recently treated with gonococcic vaccines, the gonorrhea complement fixation test is of little value.

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ORIGINAL ARTICLES

Parenchymatous Gastric Haemorrhages

BY DR. C. A. EWALD
Berlin

(Especially prepared and translated for this Journal)

THE usual causes of gastric haemorrhage, appearing as haematemesis with bloody stools or occult intestinal haemorrhage, are well known. The source of the haemorrhage in haematemesis is located either in the oesophagus or in the stomach itself. In the former location, the cause may be a peptic ulcer of the oesophagus, a fissure, an inflammatory process, a traumatism or the same lesions may involve a diverticulum. Still more frequent, however, are ruptured varices which occur under conditions of circulatory obstruction as in hepatic sclerosis or occlusion of the portal vein. J. Singer (*Med. Klin.* No. 22, 1912) reports a rare form of oesophageal haemorrhage with dysphagia and vomiting of clear blood and bloody mucus, in a case of chronic anaemia with contracted kidney. In such cases, the blood flowing first into the stomach, accumulates and is finally vomited, thus giving the appearance of primary gastric haemorrhage.

Just as blood from the oesophagus may accumulate in the stomach and appear as a gastric haemorrhage, so it may also enter the stomach from the intestine when the source is near the pylorus as in duodenal ulcer.

Haemorrhages from the stomach itself may be due to erosions of the mucous membrane, peptic ulcer, cancer, rarely aneurysm of the gastric arteries. Obviously, one must distinguish from naso-pharyngeal haemorrhages or from minor haemorrhages from a very irritable mucous membrane, as in chronic gastric catarrh, due to the introduction of the tube.

None of these haemorrhages will be considered here. Attention will be limited to those occurring without macroscopically or microscopically demonstrable lesions of the mucous membrane of either the stomach or oesophagus. Such haemorrhages vary greatly in amount and may be so severe as to be fatal.

One of the most frequent parenchymatous haemorrhages is vicarious menstruation. To the best of my knowledge, this was

first observed by my former student, Prof. Kuttner (*Berliner Klin. Woch.*, Nos. 7 and 8, 1895). One occasionally finds blood in the stomach in women about to menstruate, usually in small quantity and observed only when the gastric contents are aspirated, but sometimes, genuine haematemesis occurs. Such haemorrhages either accompany frank menstruation or take its place. This peculiar occurrence was, at first doubted, but it has subsequently been confirmed by others. (Author, Congress for Internal Medicine, 1902, page 120.) The same kind of vicarious menstruation may occur from haemorrhoids (F. Boas, *Diseases of the Stomach*, 1911, page 365.)

Another source of parenchymatous gastric haemorrhage is chronic jaundice as in various severe lesions of the liver, portal obstruction, thrombosis and phlebitis. But, in these cases, haemorrhages beneath the skin and from other mucous membranes are usually coincident, so that we are not dealing with isolated gastric haemorrhage. We consider these conditions as due to abnormal penetrability of the vessel walls.

Severe haemorrhages of the stomach and intestines occur also in purulent appendicitis. Dieulafoy (*Sem. Med.*, 1901, page 53 and 67) first called attention to such haemorrhages, and others have subsequently reported similar cases (Author, *Deutsche Klin.*, 1904, vol. 5, page 479; H. Riese, *Med. Klin.* 1910, No. 27), in which the closest examination of the gastric and intestinal mucous membrane showed no lesions. Although this is by no means established for all cases, we assume that we have to deal with a thrombosis of the mesenteric vein, and, especially, of those branches which course in the mesentery of the appendix.

Occasionally, the vomitus of tabetic cases is bloody. I do not allude to cases of so-called nervous vomiting of hysteria nor to cases of disease of the central nervous system which, toward the close of the vomiting, yield bloody masses. Under such circumstances, the source of the bleeding is clear: on account of the strain of the mucous membrane in gagging and vomiting, blood reaches the cavity of the stomach. I allude, rather, to the vomiting of black masses as occurs in the so-called crises noires. Vulpian (*Mal. des Syst. Nerveux*, Paris, 1879) and Charcot (*Gaz. Med.*, 1889, No. 39) have concluded the cause of these black crises is a trophic disturbance of the vessel walls analogous to what occurs in the subcutaneous haemorrhages of tabetics. Only in rare cases are frank alterations found in the form of ulcerative processes of the mucous membrane. Some time ago, I reported such a case in which a fresh peptic ulcer was manifest. But these are quite peculiar cases in the total of crises noires and this total amounts to not more than 2 or 3

per cent. of gastric crises of tabes. As a rule, the gastric mucous membrane is free from any lesion. A. Neumann (*Deutsche Zeit. für Nervenheilkunde*, vol. 29, page 398) explains these haemorrhages as due to rise of blood pressure in the course of the crisis, as has been generally held for the abdominal crises of tabes. But, in such cases, arterio-sclerotic changes are also present, arising even in fairly young individuals on a syphilitic basis, syphilis, indeed, being a frequent cause of tabes. G. Singer (1.c.) has recently reported several cases of quite sudden and severe gastric and intestinal haemorrhage in which no other cause than a luetic vascular lesion could be determined. However, these cases did not come to necropsy. The patients regarded the haemorrhages as purely nervous and of slight significance, although they vomited and passed by bowel considerable masses of blood. But, as Singer remarks, this is a manifestation that is characteristic of syphilis.

In the two following cases, observed by me, the existence of syphilis is, on the other hand, fully excluded by the history, the clinical manifestations and the post mortem findings so that there remains to be considered nothing but a parenchymatous haemorrhage. One case has already been reported in my *Clinic of Gastric Diseases*, third edition, page 417. The other is very recent. The first case was that of a man aged 24, admitted on account of moderate complaint of dyspepsia, with no previous gastric or syphilitic history. Quite suddenly, he had a severe gastric haemorrhage with bloody vomit and stools, repeated after a short intermission, so that the patient died. A careful necropsy revealed no lesion of either the gastric or the intestinal mucous membrane, nor arteriosclerosis nor any other organic change, indicative of syphilis.

The second case is especially noteworthy. A man aged 48, with no previous sickness, the father of healthy children, without alcoholic or syphilitic history, with negative Wassermann reaction; complained of moderate dyspeptic symptoms for the last three or four months but did not come to the clinic on their account, until he noticed a swelling in his abdomen and wished to know if it was serious. He proved to have an enormous spleen, extending two fingers' breadths to the right of the median line. It was smooth, not painful on pressure, the hilus could be plainly felt. No vascular murmurs could be heard over the tumor. There was no change in the liver, no icterus, no blood in the stomach contents or stools, no eggs of parasites, no changes in the ocular fundus; Wassermann reaction negative; large amount of indican in the urine but neither albumin, sugar nor urobilin. Passage of the stomach tube was strongly opposed

but free HCl was absent in the stomach contents. The blood contained 110% of haemoglobin, 5,280,000 red cells, 20,000 white cells. The latter consisted of 84% multiforminuclears, 7% large lymphocytes, 2% small lymphocytes, 2% eosinophiles, 3% basophiles, 2% transitional forms. In short, there was no special alteration beyond a moderate polyglobulia.

By these findings, leucocythaemia, pseudo-leucocythaemia, hepatic sclerosis, Banti's disease, etc., were excluded and the diagnosis was limited to echinococcus cyst and thrombosis of the splenic vein. On the 14th day after admission, the patient, who had, up to this time, felt quite well, suddenly vomited 1240 c.c. of watery blood, without any premonitory symptoms. At the same time he passed several bloody stools. The splenic tumor noticeably diminished, thus dispelling the idea of an echinococcus cyst. After a few hours the patient died in collapse, in spite of every conceivable means of haemostasis and stimulation.

Section revealed a thrombosis of the splenic vein, evidently not recent. The thrombus had a central canal, as was easily seen in microscopic section. The venae gastricae breves and the gastro-epiploic vein were enormously distended. Occasionally parietal thrombi were found in the radicles of the portal vein. The liver, except for a slight fatty infiltration, was intact and, in particular (microscopically also), showed no interstitial inflammation. There was no ascites, peritonitis nor glandular swellings. The capsule of the spleen was smooth, the splenic pulp was rich in blood, tough, but not altered microscopically except that the vascular tissues were slightly thickened. In the whole course of the alimentary canal, there were no macroscopic nor microscopic lesions of the mucous membrane nor of the vessels, i.e., no erosions, ulcers, varicosities, etc.

Two questions suggest themselves: 1. What was the origin of the thrombosis of the splenic vein? 2. What was the direct cause of the haematemesis?

M. Simmonds (*Virchow's Arch.*, vol 207, page 360, 1912) has recently reported seven cases of isolated thrombosis of the splenic vein. In all, syphilis was demonstrated. Most had haemorrhages arising from ruptured varicosities or ulcers of the gastric mucosa. He concludes that the thrombosis developed from sclerotic changes in the vessels, occasioned by an unknown bacterial poison in connection with the syphilitic virus. But, in my case, syphilis was positively excluded. In a case of Edens (*Grenzgebiete der Med. und. Chir.*, 1908, vol. 18, page 59) the splenic thrombosis was attributed to trauma, but nothing of the sort had occurred in the present case or, at least, the patient had

given no history of an accident, although, with us, it is to the self interest of laborers to do so. The origin of the thrombosis, therefore, remains obscure.

2. The haematemesis cannot be explained except on the ground of a parenchymatous haemorrhage resulting from the markedly dilated gastric veins. The blood of the splenic vein whose normal course was obstructed, had found another path to the portal vein through the dilated *venae gastricae breves*, and the gastro-epiploic vein and through their radicles, the haemorrhages must have taken place. Whether the haemorrhage was by diapedesis or through minute ruptures of the vessels, remains in doubt; but, as we could find nothing in the way of a lesion, either macroscopically or microscopically, we are justified in considering the haemorrhage as parenchymatous. The severity of the haemorrhage and the absence of every apparent cause for its sudden occurrence are remarkable.

INTESTINAL HAEMORRHAGE SIMULATING ULCER. C. Capezzuoli, *Riv. Crit. di Clin. Med.*, February, 1912. Male, aged 30, good family and previous history, except for two previous haemorrhages, two weeks and one week before first examination, judging from symptoms. Red cells 880,000, blood in faeces for ten days, otherwise clinical pathology negative. After nineteen days, slight haematemesis, indications of considerable bleeding, death. All sources of haemorrhage excluded but diapedesis. Pathologic changes as described by Dr. Ewald.

FIVE-INCH HAIR PIN IN CAECUM, L. McGavin, *Lancet*, Jan. 11, 1913, reports a case in a physician who used the straightened pin to make an application to his own throat and accidentally swallowed it. No symptoms attended its passage through the upper alimentary canal. The radiogram showed the pin clearly but gave no idea as to its location. The pin was removed by section.

ABDOMINAL PREGNANCY WITH LIVING CHILD. J. S. Horsley of Richmond reported the case to the Southern Surg. and Gyn. Assn. (*Critic and Guide*, March, 1913). The patient was colored, previously normal, and the condition was recognized by the emptiness of the uterus, at about the completion on pregnancy. A male child, weighing six pounds was removed by section. 103 cases of abdominal pregnancy were found in the literature from 1809 to 1912, in five of which mother and child were alive and well one year after operation.

Investments For Professional Men

BY JOHN W. VAN ALLEN, ESQ.

Buffalo

FOR some reason or other, which I believe is quite unknown to you, it has been deemed quite proper to consider the members of your profession as active buyers of mining, promotion and other alluring stocks, calculated to sufficiently remunerate the seller, but in most instances leaving the patient in a more or less exhausted state financially or otherwise.

LIFE INSURANCE.

The necessary education of a professional man today is fraught with so much of expense that upon the beginning of his career he is likely to have incurred obligations, the payment of which ought, in some manner, to be assured in the event of his sudden demise. To this end a carefully selected life insurance policy covering the amount of his obligations is probably the least expensive—the premiums being payable in installments—of any form of guarantee against loss.

While not generally practised, I am an earnest advocate of the insuring of one's life to his estate in a sum equal at all times to the amount of any obligations by notes, mortgages, contracts or otherwise outstanding at any time.

When, during the course of your professional life, you have been able to capture and to accumulate a family, their well-being, in case of your death, should be safeguarded by further insurance, even though you may have among your properties stocks, bonds or other securities which would be valuable assets in case of death. The reason for this is more apparent when you consider that estates cannot be closed ordinarily within a period of one year and during that time stocks, bonds or securities might have to be sold at a sacrifice in order to provide actual cash for living expenses to the members of your family, so suddenly deprived of the cash producer. The life insurance in this case provides practically immediate cash available to your wife or family, and it should be payable direct to them, with which to pay expenses until an opportunity has arrived either to sell your securities at good advantage or to readjust themselves to the changed conditions brought about by your death.

SAVINGS BANKS.

Under the laws of the State of New York, and, in fact, under the laws of practically all of the states, savings banks are permitted to invest only in the most conservative securities. When

you deposit your money in these institutions you receive, at least in this city, interest thereon at the rate of 4% per annum. The institution takes your funds and invests them for you in conservative securities, generally receiving an income greater than 4%, the difference in the amount paid you as interest and the amount received from the security as interest representing the cost of operating the bank. In other words, the bank makes your investments for you, charging as its commission or services the difference between what you get and what it gets.

To a man unacquainted with securities in general, and to a limited amount, it is generally wiser to pay savings bank experts this commission than to endeavor to make the selections of securities himself.

BONDS.

An income greater than sufficient to pay living and business expenses, insurance premiums and a savings bank deposit may, with judicious handling, be invested in approved stocks and bonds, yielding a much higher interest income than savings bank interest. If, for instance, after making a careful study of the securities which savings banks purchase, you are able to select good securities which those banks would purchase for themselves, you will be able to save the amount which you would pay for their services, thus securing, instead of 4%, probably between 4 and 5%, and if by mortgages on real estate, perhaps 6% annually.

There are good bonds which yield a fair rate of interest and have a general market where they can be readily sold, which do not come strictly under the head of savings bank investments, although they are practically as safe; and careful inquiries among investment bankers will usually disclose such bonds for sale.

STOCKS.

Stocks at the best are more or less speculative, dependent largely upon the character of the business in which the company issuing them is engaged, and to an equally great or greater extent upon the management and control of the business. In order to make them fairly conservative, there should be in the company, in addition to assets equal to all of the current debts, mortgage and bond obligations, sufficient assets to constitute a fair proportion of the par value of the stock, and an earning capacity in all of the assets together, taken as a unit, to meet all charges and yield a fair dividend to the stockholders.

Of course, preferred stock is more safeguarded than common stock generally, both as to distribution of principal in case of dissolution and as to the payment of regular dividends before any dividends are paid upon the common stock. It must be remembered, however, that preferred stocks usually carry only limited dividends, while common stock ordinarily pays dividends equal to the net earnings after paying expenses and other obligations, including the stated dividends on the preferred stock, and the amount of these, of course, depends again upon the earning capacity of the assets as a unit and the character of the management.

CONCLUSIONS.

I believe, that based upon a modest income as a start and gradually increasing as the years go by, the accumulated income of professional men should be invested about as follows:

1. Life insurance payable to your estate, equal at all times to the amount of your financial obligations.

2. Life insurance payable to your family sufficient to provide them with ready cash in case of death, and for a sufficiently long time thereafter to readjust themselves to new conditions and realize to the most advantage on other securities which you have accumulated during your lifetime.

3. A moderate savings bank account.

4. Approved bonds with a wide market, yielding a fair income.

5. Preferred stocks issued against assets at least double the amount of the par value of the amount of such stock issued, in a company whose annual net profits are equal or greater than twice the amount of the required preferred stock dividends.

6. Common stocks with a fairly wide market in companies whose earning capacity for a series of years, and the payment of dividends during that time, warrants the belief of safety of principal and continuity of dividend payments.

7. When you have a fair amount of property represented in the foregoing investments, then certain not too highly speculative transactions may be indulged in with that surplus, your situation being such at the time that a good sized estate will not be prejudiced by the losses which you make in endeavoring to make large profits by taking long chances.

NOTE.—The Cave Men Association, Inc., of New York, was incorporated last fall to "expose fraud in the exploitation of worthless mining properties and to standardize mining practice."

A Much-Neglected Branch of Dermatology.

BY W. W. QUINTON, M.D.
Buffalo

IT is certainly true that the medical profession does not give to cosmetic treatment the attention which it deserves. The result is that many persons are driven to the so-called "dermatologists" who advertise freely in our daily press, and who reap thereby a plentiful harvest.

For example, one individual advertises as follows: Superfluous Hair and Facial Blemishes Removed by Multiple Electrolysis. Wasted, Hollow Cheeks and other Imperfections of Features Corrected by the Famous Electro Vacco Process."

The newspapers are full of paragraphs exploiting nostrums for the cure of wrinkles, superfluous hair, and for the care of the scalp, and for every conceivable eruption.

It seems to me that the medical profession is deeply responsible for this state of affairs, because, by our indifference, we drive many of our patients to the quack and the charlatan. Beauty is a priceless possession, and when we are called upon to prescribe for women who are suffering from some disfiguring condition, we must either accomplish the result they desire or else expect that the case will pass on to some irregular practitioner.

The average physician in general practice regards these cases too lightly. He seems to be impelled by the fear that he may earn the despised title of "Beauty Doctor" if he makes any determined and serious attempt to handle such cases. The result is that most women seek out, by preference, the man who sports the initials "E. D." after his name, knowing that they will be taken seriously and treated accordingly, and fondly believing that the treatment will be scientific. If the prospect of relief seems hopeful to her, a woman is not apt to forego a course of treatment simply because a practitioner has no college degree and is not entitled to print "M. D." on his professional cards. When they suffer with eczema, psoriasis, lupus, etc., they are likely to consult one of the regular profession without delay, but if it be a case of superficial blemish, "bad complexion," "pimples," or some disease of the scalp, nine times out of ten it is the quack who gets the case. How many women slip secretly into such establishments in search of treatment which they should receive openly, at the hands of a regular practitioner? How many such women gain the relief which they seek? How many of them are marred for life as a result of ill-judged, bungling treatment?

The futility and in many cases tragedy of trusting to quack treatment is well known. One of many cases which have come to my notice is a good illustration. A woman with a poor complexion—for which malnutrition and ill health were directly responsible—visited a “beauty specialist” who advertises freely and has an extensive clientele. For the sum of two hundred dollars this specialist guaranteed to transform her skin into one of youth and beauty. The procedure consisted in applying an acid or a strong solution of bichloride, with an after dressing of strips of zinc oxide plaster. This induced a rapid scaling and at the end of ten days when the plaster was removed it revealed a new skin as delicately pink and white as that of a newborn babe. Unfortunately, at the end of a week another lightning-like transformation occurred and soon after the woman’s complexion became worse than it ever had been before—so bad in fact that eventually she had recourse to a regular dermatologist for treatment and cure. Nothing remained of the original quack treatment but the memory of intense and prolonged pain and the stub in the check book with its two hundred dollar notation.

It will be well to make note, first of all, in the treatment of this subject, that applied cosmetics and the principles of hygiene go hand in hand. “Wasted, Hollow Cheeks and other Imperfections of the Features” will never be corrected by local means alone—even the “Famous Electro Vacco Process” will fail in such instances.

Here, then, is where the non-scientific man commits a gross error. We cannot expect the face to remain in a normal condition of health and beauty when every other part of the body is in an abnormal state. Our first step must be to search out and remove the causes which are reacting to the detriment of the patient’s system. This involves a thorough physical examination. If we find, for example, that an auto-intoxication is responsible for a skin eruption, we must treat the patient in such a way that the poisoning will cease. Sometimes we find one local condition responsible for another, as, for instance, an acne rosacea which is kept up by hypertrophic or atrophic conditions in the nose, which disturb the circulation. Or we may find that an unhealthy scalp is responsible, to a marked extent, for a disfiguring eruption on the face.

We regulate the diet in all cases—carefully prescribing such articles of food as each individual case requires and impressing the patient with the great importance of this measure. Tonics are essential in many cases, but what we must emphasize in

our treatment is the careful observance of hygienic rules. The proper kind and amount of food, regular hours, rest at night, exercise and fresh air, plenty of pure water to drink, regulation of the bowels and proper bathing. For the foundation of all beauty of face and form is health, and this must constitute the basis for our treatment. To it we add, as the case may require, various local measures.

Facial massage has its place in cosmetic treatment when applied intelligently. A massage powder may be used if desired.

We may use facial applications, either in the form of lotions or ointments, which vary in strength from the very mildest, soothing preparations, to those which have a profound exfoliative action on the skin. But we must never neglect the foundation of health which is so necessary if we wish the improvement to be permanent.

Not the least important in the treatment of acne is the local treatment of each pustule and the removal of every comedone. This will be facilitated by a preliminary steaming of the face by means of a dermo-thermostat—or at least a preliminary bathing of the face with soap and hot water. We soften the water used for washing purposes by adding borax or camphor and benzoin.

There are a variety of neutral soaps on the market which are excellent in these cases. Hebra's alkaline soap spirit may often be used to advantage. Too frequent washing of the skin, particularly in the cases of those whose skin is over-sensitive, will do harm. The importance of thoroughly drying the skin after washing cannot be overestimated. Sponging with alcohol immediately after bathing will benefit some cases.

The removal of small blemishes—warts, moles, new vessel formations, etc.,—may readily be affected by electrolysis, which, in the hands of the skilful operator, will give excellent cosmetic effects.

In the treatment of hypertrichosis—superfluous hair—electrolysis offers a safe and sure treatment. If the technique be good, no scarring will result and the skin will be left in excellent condition. The use of the X-ray, with the Cornell tube, also offers a safe treatment for this condition and one which is preferred, by many operators, to the use of the electric needle.

The care of the hair is of great importance. The scalp suffers either from a lack of attention on the one hand or from too much of the wrong kind of treatment on the other. Most of us are convinced that the general health has a direct bearing on the condition of the scalp, so our first effort must be to correct

any systemic disorders which may exist, and to bring the patient's bodily functions as near normal as possible. When we turn to local treatment most of us are non-plussed by the multitudinous prescriptions which our text books reveal. We must not allow this to confuse us for it will be found that each case must be studied and treated individually, for no one treatment will apply equally well to every case.

The condition must be treated early, for when the hair has been lost and has been replaced by a lanugo growth, and when marked changes have occurred in the sebaceous glands, the prognosis is most unfavorable. Women are quick to note a seborrhoea of the scalp and generally seek advice and treatment without delay. Too often they turn to the quack, or to quack nostrums which are so freely advertised in our daily press. This is the surest way to lose time, money and hair, for if ever an affection required careful, scientific attention, this one undoubtedly does. Reverse the usual "before" and "after" pictures which accompany so many advertisements and you will have a faithful representation of the result of quack remedies and treatment.

In a majority of cases—which are not too far advanced—we may look for favorable results if our patients will faithfully carry out treatment. The scalp must be shampooed at regular intervals and in the right way; scientific massage is valuable, and regular brushing and combing of the hair should be insisted upon. We must prescribe lotions or ointments with exact reference to the condition of the scalp and hair.

The effect of the mind on cutaneous disturbances, must not be lost sight of. Even so small a matter as the loss of a night's rest will leave its mark on the skin; a much more serious effect will be produced if the patient allows her mind to dwell upon her symptoms. Here psychotherapy has its place, quite as much as in the graver bodily disturbances. Often a nervous breakdown has its incipency in just such a trifling cause as a "bad complexion." The incidental worry, loss of sleep, disinclination to appear in public, etc., soon establish the vicious circle. The general health suffers, the "bad complexion" becomes worse, and the worry and its train of attendant symptoms are exaggerated. It only requires a jovial physician to make light of the matter and prescribe a harmless "placebo," and another convert and faithful worshipper is presented to the advertising quack.

It is impossible to more than touch upon a few of the points of cosmetic treatment in a single article, and it was not my intention to attempt more. If this article has the effect of

arousing some interest in a much neglected and almost overlooked branch of dermatology, then it will have served its purpose. The point is that we, as scientific men, are in a much better position to administer cosmetic treatment than the hair-dresser, the barber, or the charlatan. What little knowledge they possess, is ours also, and in addition we have the greater advantage of collegiate and hospital training.

To improve the medical situation in this country we must educate the public. I venture to say that if every physician would take up arms and join the American Medical Association in its fight against medical fakes and nostrums, and make an earnest attempt in his immediate locality to put the public in possession of the facts, then, indeed, it would not be long before the patent medicine men would be forced to adopt some more honest if less lucrative form of employment.

The sooner we realize that cosmetic treatment is a part and parcel of scientific dermatology, the better for the ultimate standing of that special branch of medicine. Certainly I know of no other class of cases where scientific management and painstaking technique are more urgently required, both of which are too much to ask of the barber and the quack-electrician.

If every physician would do his duty in the interests of cosmetics, that branch of dermatology would soon assume its proper place in medical circles, to the great dismay of the quacks and to the greater advantage of a long-suffering public.

W. W. QUINTON, M. D.

POLYMYOSITIS WITH MULTIPLE LIME DEPOSITS. Sara Welt Kakels, *Paediatrics*, March, 1913. The case was in a boy of five, with no significant family history, except that he had had ophthalmia neonatorum with recovery. Lameness, painful swellings, an eight-day exanthema diagnosed as scarlet fever, two years ago, subsequently, occasional urticarial attacks. Lime demonstrated in subcutaneous tissues and probably present in muscles.

HYDROCHLORIC ACID FORMATION IN THE STOMACH. J. Lopez-Suarez, *Biochem. Zeit.*, 1912, No. 46 (cf. *Jour. of the A. M. A.*, January 25, 1913, page 284 and March 15, page 838) claims that the parietal cells of the gastric tubules are poor in chlorids and are neutral or even alkaline even when HCl is being secreted. The chief cells contain more chlorin than the parietal, which have hitherto been considered oxyntic cells. The fundus is known to produce HCl more than other parts of the stomach and actually contains a slight relative excess of chlorin.

A Simplified Technique in House Operations

BY DR. JULIUS RICHTER

Buffalo

THAT this subject is so sparsely treated by all modern authors is not remarkable in view of the many well-governed and easily accessible hospitals, and the growing tendency of our profession to make the public subservient to its wishes.

Every man in active practice knows that the public very often demands that a required operation be performed in the patient's home; that to perform it there is often necessary to the patient's well-being; that we are sadly in need of a simplified course of procedure; and that when a technique has been thought out, very good work can be done under home conditions. The subject is worth an evening's discussion.

There is no surgical procedure of which I know, that cannot be performed in the home, providing the patient can afford the assistants and accessories necessary. An operation in the house should be performed according to hospital technique as nearly as circumstances will permit; but do not allow marble and nickel-plated trimmings to awe you into the belief that ingenuity cannot work without them. The simplicity of the Mayo clinic is in direct proportion to its efficiency. Nor must one forget that a number of assistants in hospital clinics are there for experience and not to fill a necessity. It has often appeared to me that many clinics substitute numbers for competence—million-dollar operating rooms with student anaesthetists.

Then, again, the elaborate instrument displays are ridiculous when one sees so competent an operator as Dr. Robert Morris perform an appendectomy with only scissors and one haemostat. It is not, therefore, a hasty deduction to state that the paraphernalia for this work can be made simple, inexpensive, and portable.

The public have always preferred to be sick at home, if at all, rather than in a strange place. If a disturbed mental state is inimical to a patient's recovery, it seems logical that, other things being equal, he will do better in his home than in a hospital. From an economical standpoint I doubt whether, value for value, he is not a saver by remaining at home even with the added expense of a trained nurse. In cases remote from hospitals, emergency takes precedence over every other consideration. For these cases alone, a surgeon ought to be provided with a technique and outfit for the performance of house operations. The number of trivial minor cases such as finger amputations, circumcisions, adenoids and what not, which are forced into the hospitals by ambitious surgeons, is absurd. One might well

feel ashamed to inflict a wage-earner with hospital expense for so small a thing as a felon.

The standpoint of the attending physician must also be candidly discussed. When a large public hospital donated by the people of a free country will rule that no physician or surgeon other than those of the hospital staff shall operate or attend upon his patient, private or otherwise, while in that institution, it

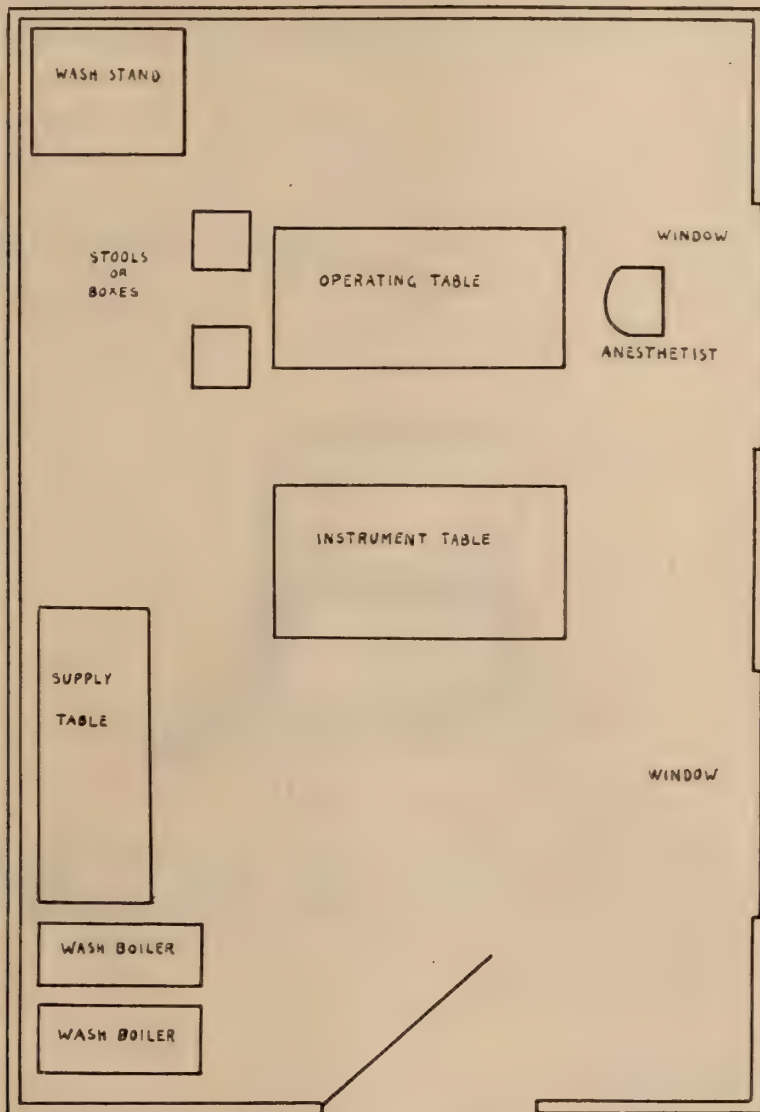


Diagram of Operating Room.

would seem that self preservation requires outside practitioners to keep their patients out of hospitals. Competent operators DO exist outside hospital staffs, and their only alternative is in the house operation.

It follows from the above that the house operation is a needed work and we will proceed to a consideration of its technique.

There are a few absolute essentials without which one cannot well dispense. (1)—A warm, well-lighted room to serve as the operating room. This room should be situated near the running water and the source of heat for sterilization. . The kitchen is

a preferable place, but often an upper room near the bath gives better light. Artificial light, I might say here, is often sufficient, especially if the lights have reflectors. The room should be such as can be thoroughly cleaned, but do not let its unhygienic state deter you in the confident effort at aseptic work. I doubt whether any room has more virulent pus spilled about it at times than the hospital clinic, yet you work there with impunity. On the other hand, obstetric operations, are daily performed by you, especially among the foreign population, in the most filthy environment with remarkably little infection. The gist of it is that healing by first intention depends more on the asepsis of the operator and field of operation than on the environment. (2)—A trained nurse to assist at the operation and attend the patient thereafter. In the minor cases her after attendance may be dispensed with. She ought to be of a practical turn of mind, familiar with hospital technique, and preferably one with



Suit Case Packed for Operation.

whose work you are acquainted. (3)—A surgical asssistant and an anaesthetist, in both of whom you place complete confidence. (4)—The necessary paraphernalia, which includes:

Surgical instruments.

Utensils.

Accessories.

It would be futile to name the surgical instruments required, as each man has his method and the particular procedure you institute will be described and the instruments enumerated in any first-class operative surgery. Although the outlay for instruments is a necessary one, it is often remarkable how ingenuity will overcome the need of complex mechanisms.

The utensils and accessories comprise those to be supplied by the patient and those to be supplied by the surgeon.

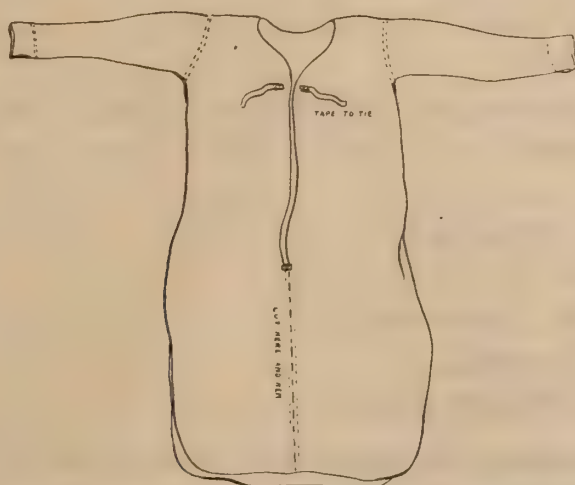
The patient will supply the following utensils:

2 wash boilers,

1 long-handled dipper or ladle for hot water,

1 kitchen table measuring two by four feet to be used as an operating table,

- 2 kitchen tables of about the same size,
 - 1 small table or stand about 2x2 feet,
 - 2 wooden kitchen chairs,
 - 2 wooden or china pails,
 - 3 china or enameled pitchers, each holding at least three quarts,
 - 1 bed pan and
 - 2 wooden boxes or stools about 18 inches high.
- The patient will also furnish the following accessories:
- 3 clean sheets,
 - 36 soft towels, closely woven,
 - 2 woolen blankets,
 - 1 piece of oil cloth or rubber sheeting, and will get the following from the apothecary's:
 - 2 half pound cans of ether and four ounces of chloroform,



Serviceable operating gowns can be readily made from men's cotton night shirts. The shirt is cut, hemmed, tapes attached wherewith to tie, and the garment worn as any operating gown.

- 1 pint alcohol,
 - 1 roll zinc adhesive two inches wide, and
 - 1 cake ivory soap.
- The operator will supply the following utensils:
- 4 large enameled basins with flat bottoms,
 - 4 shallow enameled butcher's trays measuring about 15x30 inches,
 - 1 deep enameled tray measuring about 6x12 inches,
 - 3 small enameled custard cups of different sizes to nest into each other, and
 - 1 pair canvas or leather leg holders.
- The operator will furnish the following accessories:
- 6 dozen sterile gauze sponges in packages of one dozen,
 - 8 sterile large gauze packs measuring a yard square,
 - 1 sterile package containing complete dressing as follows:
 - 1 dozen gauze compresses cut 18x18 inches, and folded to measure 6x6 inches.

- 1 large pad of absorbent cotton (a piece 18 inches long cut from a roll and folded once over),
- 1 many-tailed bandage of cotton cloth,
- 4 roller bandages four inches wide,
- 1 dozen large safety pins.
- 1 four ounce bottle tincture of iodine,
- 1 six ounce bottle hydrogen peroxide,
- 1 two ounce bottle 10 per cent. camphor in olive oil,
- 1 hypodermic syringe with accompanying tablets of
 - Morphine sulphate, $\frac{1}{8}$ gr.,
 - Nitroglycerine, $\frac{1}{100}$ gr.,
 - Strychnine sulphate, $\frac{1}{60}$ gr.

The required suture material. (Catgut in sealed glass tubes is preferable. These are kept in a fruit jar with sufficient carbolic acid to cover them).

- 1 dozen fibre hand brushes,
- Drainage tubes,
- 4 operating gowns sterile and each in a separate package. (These are cheaply and readily made from men's large cotton night gowns),
- One package containing
 - 2 rubber aprons,
 - 3 sterile face masks,
 - 3 sterile caps,
 - 3 pair rubber gloves.

The day preceding the operation the nurse or surgeon should visit the patient, select the room to be used, have removed therefrom all curtains, pictures and unnecessary furniture, have the woodwork wiped with damp clothes and the floor scrubbed. In emergency cases, where one is to operate at once, it is unwise to allow the cleaning process to contaminate the air with dust. The two kitchen chairs are scrubbed, the tables and pails cleaned and all placed in the room.

One of the wash boilers is thoroughly cleaned, filled with clean water, the dipper placed within, the whole covered and boiled for ten minutes. While this last is in progress the patient may be prepared.

The patient should have taken, or should have been given a full bath and have had the site of operation shaved and scrubbed. A towel may be boiled for a few minutes, wrung out of a weak bichloride, placed upon the area and held in position by another towel or a bandage. A cathartic may or may not be given according to the proposed operation. In work upon the perineum, rectum, etc., it is the better practice to give the cathartic a day before and give an enema on the morning of operation. The

reason is obvious. With instructions to the patient to forgo food, he may be left until the morrow.

Before leaving the patient's house, the wash boiler with boiling water should be set aside to cool and the other wash boiler should be cleaned, filled with clean water, covered, and instructions given to have it actively boiling at a given time the following morning.

The nurse or surgeon upon arriving next morning will proceed as follows: The linen and silk-worn gut sutures are threaded on the needles required and placed securely on a folded towel by several bites of the needle. The towel is then folded to cover the sutures, and it, with the drainage tubes and instruments, is wrapped in another towel and the whole then lowered into the boiling water of the wash boiler. Next the basins, pitchers, butcher's trays, deep tray, and custard cups are placed in the boiling water followed by the fibre brushes wrapped and pinned in a towel, the three pair of rubber gloves wrapped and pinned in a towel, and the remaining towels similarly wrapped and pinned.

While these things are being boiled, the operating room may be arranged as follows: The operating table is placed near the window so that the light is utilized to the best advantage. It is then covered with one woolen blanket, the oil cloth or rubber sheeting, and one of the bed sheets. One of the other tables is placed at that side of the operating table upon which the surgeon elects to work, leaving sufficient room between for convenience of motion. This table is to be used for instruments, sponges, two basins, sutures, etc. A pail is placed upon the floor between these tables for waste material. The remaining table is now placed at one side of the room and covered by the other bed sheet. This table is to be used for supplies. Beside it are placed the other pail and the wash boiler full of sterile water. The small stand is placed opposite the last table and is used as a wash stand.

Having thus arranged the operating room, the wash boiler containing the utensils is now brought in and, by means of placental forceps, the various articles are withdrawn and placed as follows: The butcher's trays are placed side by side upon the instrument table thus affording a sterile surface for instruments, sponges, etc. Two basins, one filled with warm sterile water and the other with warm, weak bichloride solution, are next placed there. Into the bichloride are placed the towels, well drained, and the gloves. One towel is wrung out, placed on the supply table, and on it is placed the brushes. The instruments are now brought out, drained, and placed on a tray: the custard cups on a tray; the pitchers on the supply table; and the remain-

ing two basins on the wash stand, one filled with warm sterile water and the other with warm, weak bichloride solution.

The wash boiler is emptied, refilled with clean water, brought to a boil, and placed next to the one with cool sterile water. Six teaspoonfuls of salt are placed in a sauce pan with a cup of water and boiled for a few minutes. Half of this solution is poured into one pitcher, and half into another. One is filled with three quarts hot and the other with three quarts cold sterile water. By mixing the contents in the third pitcher, normal salt solution of any temperature may be produced.

The nurse now opens the packages containing gowns, masks, caps, etc., upon the supply table, being careful lest she contaminate the contents. Having done this, she scrubs up, receives a cap, mask and gown, and puts on her rubber gloves. She now spreads the instruments, drainage tubes and needle towel conveniently. She then, with thumb forceps, withdraws from the fruit jar, which the surgeon opens and holds, the required number of catgut tubes. These she places in the deep tray and the surgeon pours in enough alcohol to cover them. The catgut tubes are now in condition to be handled. The surgeon next fills one custard cup with tincture of iodine, and one with peroxide of hydrogen.

The patient is now brought in, dressed in night gown and stockings, and is placed as follows:

FOR ABDOMINAL OPERATIONS.

The patient is placed upon the table so that the knees bend over the table's end. It is well to have the woolen blanket folded thick over the table's end to avoid undue pressure on the under aspect of the knee. The patient's ankles are strapped firmly to respective legs of the table and his feet are allowed to rest on the boxes. The anaesthetic is then begun and the patient's hands pinioned under him.

The assistant scrubs up and, assisted by the surgeon, dons cap, mask, gown, and gloves. The surgeon removes the dressings from the patient's abdomen and the assistant, by means of a gauze sponge held in a haemostat, paints the abdomen liberally with tincture of iodine. Then with the warm bichloride towels thoroughly wrung out, he covers the patient. This procedure of covering the patient with wet towels will be objected to by some. It will be remembered, however, that but a few years ago it was the general routine. If the room temperature is kept sufficiently high, there need be no fear of excessive body-heat radiation.

The patient being thus prepared, the surgeon scrubs up and dons his cap, mask, gown and gloves. He purposely is last to

do this in order that he, himself, may correct any irregularity in arrangement or procedure. He now takes his place and the operation proceeds. The assistance of a second nurse is obviated by having the arrangements as described. Should it become necessary to handle an unsterile object, a sterile towel is placed over the hand and the towel discarded after use.

If the Trendelberg position of the patient is needed, it is produced as follows: The anaesthetist braces his feet against the table-legs, drawing the upper part of the table-legs toward him. At the same time the surgeon and assistant grasp the opposite end of the table, protecting their gloves with sterile towels, and raise that end while the nurse shoves the boxes under the table-legs.

FOR OTHER OPERATIONS.

In operations upon the perineum or rectum, the legs are held by means of the leg holders. Should a combined operation, vaginal and abdominal, be performed, the surgeon and assistant change the patient's position and then change their gowns and gloves, the extra ones having been provided. In operations upon other parts of the body, ingenuity must suggest the minor procedures.

The after care differs in no wise from that in the hospital. The greatest difficulty in the after management is from the well meant but generally misdirected efforts of friends and family. The nurse should be in supreme command and brook no interference from anyone. You will find that all in all, your patients recover just as often and with as happy a state of mind as in hospital practice.

SADISTIC MURDER AND SUICIDE. November 3, 1912, the body of a prostitute was found in the Bois de Boulogne. Post mortem examination showed the ordinary signs of strangulation. A peculiar and, at first, unexplained fact, was that a piece of skin, apparently human, was found between the victim's teeth. The same day a count was found dead, and with the body was a note dated the day previously expressing his intention of committing suicide immediately. But, according to the classic signs, death must have occurred November 3. Examination revealed a lacerated wound of the prepuce, with a part missing. The publicity of these two post mortem examinations led to a comparison of notes, and it was found that the piece of skin mentioned fitted the wound. Apparently, the count wished to prove an alibi by antedating his note regarding the time of suicide.

Symptomatic Epilepsy*

BY EDWARD AFFLECK SHARP, M.D.

Buffalo, N. Y.

Neurologist, Craig Colony of Epileptics

THE term Symptomatic Epilepsy is used in the present instance to emphasize the fact that all forms of epilepsy have their cause, and that some definite lesion, either of a gross or histological nature, is present in the brain or its membranes in practically every case.

The conception of the organic basis of the disease dates from the time of Galen, who thought that epilepsy was due to a peculiar alteration of the brain and of the nerves coming from it.

The term idiopathic or genuine epilepsy, while still used by many writers, is usually defended on the ground that its etiology is unknown or indefinite. Oppenheim still retains the term "genuine epilepsy," but does not place much importance in such a designation, altho he thinks an organic basis is not to be assumed for all cases, and that in neuropathic and psychopathic individuals a strong psychic shock may result in the development of epilepsy. Attacks of this character would probably be more correctly classified under the term psycho-genetic convulsions.

Numerous instances are on record where lesions of considerable extent, in the central nervous system, have been found at autopsy in cases which clinically were considered as idiopathic epilepsy and which apparently gave no history nor showed physical signs pointing to such a lesion.

While the term "idiopathic" is still used to describe certain form of epilepsy it is quite certain that some organic alteration is present as the cause of the epilepsy and that the lesions can be demonstrated in many cases.

An enumeration of the lesions found in epileptics would include almost every variety of pathological change which occur in the brain or its membranes. Many of these are of a histological nature, such as the sub-pial gliosis of Chaslin or Alzheimer, which has been found in about 40 per cent. of the cases of so-called genuine epilepsy, and the diffuse sclerosis of the cornua Ammonis found in about 50 per cent. of such cases, or the changes are of a cellular nature less easily demonstrable. In other cases gross lesions of considerable extent are found, such as thickened meninges, oedema of the pia, areas of sclerosis, porencephaly, cysts, new growths, hemorrhages, atrophy of lobes or convolutions, dilatation of the ventricles, etc.

*Read as part of Symposium on Epilepsy at Buffalo Academy of Medicine, January 14, 1913.

It is these gross lesions which will form the principal part of the present discussion and which will be supplemented by a lantern-slide demonstration by Dr. Munson, showing some of the more prominent lesions which have been found in the Craig Colony cases.

Most of the lesions found in epileptics have originated in early life or before birth as a result of encephalitis, meningitis, trauma, hemorrhages, toxaemias, hereditary syphilis or developmental defects from hereditary or other influences, and the epilepsy is to be considered as a symptom-complex or syndrome occurring as a result of these lesions.

The acute infectious diseases of childhood may be accompanied by a mild meningo-encephalitis, and this undoubtedly has some influence in producing some of the fine histological changes in the brain. Alcoholism and syphilis in the parents are important factors in producing certain changes which result in a susceptibility to convulsive disorders.

In studying the family histories of a large number of epileptics one of the most striking features is the frequency with which some hereditary factor exists, and this appears equally prominent in many of the cases which have some of the gross lesions mentioned above. Epilepsy does not belong to the direct hereditary diseases, nor does it act as a Mendelian unit in its method of transmission, but a predisposition is inherited producing an unstable nervous system and then other factors act as exciting causes. Of interest in this connection is the recent report by Marchand and Petit of a case of epilepsy occurring five days after birth in a child born of an imbecile and epileptic mother. The child died eight days after birth and autopsy showed diffuse lesions of meningo-encephalitis. Clinically the infant showed no signs of cerebral disease prior to the development of the epilepsy.

Epilepsy may develop after middle life as a result of the infantile encephalopathies, but it is more frequently the result of alcoholism, syphilis or other toxaemias, or from new growths, abscess, traumatic lesions, hemorrhage, sclerosis, etc. The senile cases usually develop on the basis of an arterio-sclerosis or diffuse cortical changes and meningeal adhesions.

Several factors are necessary for the production of an epileptic seizure. The organic lesions of the brain are constantly present and yet the attacks may occur at long intervals. In other cases equally extensive lesions are found in cases which never become epileptic. Some other factor is therefore necessary, acting as an exciting cause, to set off the discharge in the susceptible cortex.

The definite periodicity of the attacks, with an interparoxysmal period of relative freedom from symptoms, would suggest some disturbance of metabolism or some toxic agent developing in the body in excess of the ability of the organism to eliminate or neutralize the poison, and which acts, either directly on the cortical cells or through the vascular supply, as an exciting cause for the attack.

This disturbance may originate in the gastro-intestinal tract or in some of the ductless glands or other organs, and toxins are generated which have a particularly irritating effect on a cerebral cortex already lowered in its power of resistance by the presence of some organic lesion, or on an unstable nervous system the product of a neuropathic ancestry.

In children the vaso-motor system is usually very impressionable and the slightest lesion in the brain may result in a hyperaemic or anaemic condition which acts as an exciting cause for an attack.

The influence of the pituitary body in the pathogenesis of epilepsy has been pointed out by Cushing in his recent monograph. His conclusions are that undue excitability of the cerebral cortex may be a consequence of posterior lobe insufficiency, and that local scars on the cortex may prevent access of the cerebro-spinal fluid with its hypophyseal secretion which is essential to functional stability.

It is doubtful if these toxins would be able to produce convulsions or psychic disturbances except in the presence of some such lesions in the brain. Even the so-called para-syphilitic epilepsy of Fournier, which was considered a pure dynamic epilepsy from the toxins of syphilis, is probably always associated with fine histological changes.

It is on this basis that epilepsy is considered as practically always symptomatic of some organic lesion or cellular change in the cerebral cortex. If the term "idiopathic" is to be used it should be limited to the cases which develop on an hereditary basis and in which only cellular changes occur which are beyond the power of the microscope to demonstrate, but which nevertheless are assumed to be present.

Some of the cases with the most extensive lesions have shown very few or no clinical symptoms during the interparoxysmal period, and the attacks have been similar to the so-called idiopathic cases.

If one has the opportunity of studying the case during an attack, some evidence of the organic nature of the epilepsy may frequently be seen.

In an institution like the Craig Colony, where a large number of seizures are observed, one is impressed with the great variety of the clinical manifestations of the convulsions in the different patients and with the constancy with which the attacks in any individual case remain more or less of a fixed type and to such an extent that the patient is easily identified by the character of his seizure.

A definite order of invasion of the seizure, the convulsive movement starting in one extremity and always spreading to other parts in the same **regular manner, or remaining unilateral** or localized to one extremity as in the Jacksonian type of seizure, usually indicates a focal lesion, or one of greater severity, over the cortical representation of the initial movement. In some cases a definite aura will indicate the site of the initial discharge, and the presence of an olfactory, auditory, gustatory or visual aura may serve as a valuable localizing sign.

Temporary exhaustion paralysis is usually found in the extremity or part most involved in the convulsion and this may be the only evidence that a localized or unilateral organic lesion is present.

Usually the lesions above mentioned show a special predilection to affect the motor cortex of one or both sides or the deeper structures in the path of the motor fibres, **producing the various** forms of infantile cerebral palsy. Over 10 per cent. of the cases at the Craig Colony are of this type.

When a hemiplegia is manifest and is accompanied by contractures, spasticity, deformities, etc., there is no difficulty in recognizing the organic nature of the affection. In some of the cases of infantile cerebral palsy there has been almost complete recovery from the hemiplegia, and the epilepsy is the only outward manifestation of the former injury to the brain. Careful examination, however, will usually reveal some evidence of the former hemiplegia. The exhaustion paralysis following the attack has already been mentioned. During the interparoxysmal period there may be a slight rigidity of the extremity which is only found by careful testing and comparison with the healthy member, or there is a slight weakness or early fatigue of the part on exertion.

Athetoid and associated movements may be present or may be brought out only after exercise and fatigue, and a slight awkwardness of the hand on the side formerly hemiplegic may be seen when the patient is asked to pick up small objects after exercising the extremity.

The tendon reflexes are usually exaggerated on the side formerly hemiplegic, and the abdominal reflexes may be absent or more easily exhausted on the hemiplegic side.

The Babinski toe sign and other signs of pyramidal tract involvement may be present during the interparoxysmal period and they may become temporarily increased immediately after an attack.

The character of the attack may also give some evidence of the location of the lesion, and the experimental and clinical studies of Ziehen, Rothmann and others have shown that when the attack consists of a tonic and a clonic stage, the tonic component of the attack is of sub-cortical origin while the clonic component is of cortical origin.

From experimental evidence it is found that an irritation of the motor cortex without involving the sub-cortical structures is accompanied by a clonic convulsion without the preceding tonic stage, and theoretically a case having a convulsion of this character would be a favorable one for surgical intervention.

A particular clinical variety of the clonic convulsion from cortical irritation is known as "Epilepsia partialis continua" or the Syndrome of Kojevnikoff.

Lesions in the cerebellum sometimes produce tonic spasms of the extremities, and in pure "cerebellar fits" the attacks are always tonic. If clonic convulsions of the cerebral type occur in cerebellar lesions they are due to the increased intracranial pressure acting on the motor cortex.

The fact that extensive lesions are frequently found at autopsy in the brains of epileptics and that these lesions have been sometimes overlooked, shows the necessity and importance of making a thorough examination for the clinical signs pointing to such lesions, and not to consider epilepsy as a simple neurosis amenable to bromide or other sedative treatment.

Many of these lesions, altho easily accessible surgically, show the futility of attempts to operate on them, as the surface lesion is frequently only a small portion of the actual damage, and in many cases the lesions are multiple and deeply seated. But, if these organic lesions in the brain cannot be removed, they can be made less active as factors in the production of epileptic seizures by reducing to a minimum the exciting causes of toxic nature which set off the discharge. It is for this reason that so much importance is placed on dietetic and hygienic measures in the treatment of epilepsy.

The influence of these extra-cerebral factors, as exciting causes for the convulsions, is shown in the occasional brilliant results

obtained by removing sources of reflex irritation or by correcting disturbed functions of the gastro-intestinal tract, the ductless glands or other organs.

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Dr. M. Milton Portiss, of Chicago, read a paper on "Hyperchlorhydria" before Elkhart Co. Med. Soc., February 6, 1913. (Jour. Ind. State Med. Ass'n, Mch.) Meat diet contra-indicated; vegetable less irritating. Based on experiments on dogs, Dr. Portiss has prepared following table:

	Time in Stomach Hr. Min.	Am't of Secre- tion, c.c.
250 c.c. potato.....	1:30	12
250 c.c. spinach.....	1:40	15
250 c.c. carrots.....	1:25	14
250 c.c. milk.....	2:10	15
1 lb. meat (finely divided).....	4:15	32
1 lb. meat (in chunks).....	7:30	63
1 lb. meat (in chunks) plus Hyoscin- Hydrobromid	6:30	52
1 lb. meat (in chunks) plus Morphin gr. $\frac{1}{2}$	7:00	56
1 lb. meat (in chunks) plus Atropin gr. $\frac{1}{50}$	4:20	25
1 lb. meat (in chunks) plus Strontium Bromid, 15 g.....	4:15	27
1 lb. meat (in chunks) plus Strontium Bromid, 30 gr.....	3:30	17

SEA SICKNESS. E. Scheppelmann has prepared an interesting monograph on this subject published by Walter Rothschild, Berlin. *American Medicine* comments: "It has been observed that a person immersed in a salt water bath on a badly rolling ship, loses all sense of the ship's motion." We venture to disagree, though our evidence was lost along with the rest of the contents of the tub. We had no contents left.

Notes of a Trip Around the World

BY DR. REGINA FLOOD KEYES
Buffalo, N. Y.

THIS trip was made on the Hamburg-American Liner Cleveland, starting from New York October 19, 1912, and returning to San Francisco in January, 1913. About 400 passengers were carried and a crew of 375. Beyond sea sickness and a few minor ailments the only medical cases occurring were two, each in a man aged 76, one of whom dropped dead of apoplexy and the other died of perforating cancer of the intestine. The general good health was due to the extreme vigilance of the officers. Only boiled water was drunk and food was purchased with the greatest care. In Java and China the passengers were not even allowed to buy fruit, on account of the custom of using human manure on the fields, and a special supply of water was sent with passengers on land trips, even on trains.

At Manila the company found the best hotel outside of the U. S. and the only closed sewers. Two old Buffalo boys were met in Manila, Dr. Ernest Bingham, stationed at Fort McKinley, who expects to return to the States within a year; and Dr. A. B. Goff, in charge of St. Lazare Infectious Hospital. This hospital is thoroughly up-to-date. Aside from 250 lepers, there was only one patient in the hospital at the time of the visit, this one having varioloid. Dr. Goff has been in the Philippine Islands for 12 years, and is a member of the Manila Board of Health.

Capt. Wm. Davis, M. D., who left Fort Porter in November, 1912, is at Fort Scofield, in Honolulu, with 4000 troops under his medical supervision.

The most interesting medical observation was of the preparation of antivenoms (sic) at Bombay. Two venoms are used, those from the cobra and Russell's viper, either antivenom protecting against either venom, indiscriminately, although bivalent antivenom has also been prepared. The snakes are kept in glass boxes and are handled by native assistants, who first place a forked stick over the neck, then grasp the snake firmly just behind the head and express the venom from the poison sacs. The antivenom is prepared by injecting horses, which are kept at Darjeeling where the climate is cooler, the venom being shipped to this place. It is claimed that the antivenom remains potent for a year at least, and, excepting moribund cases, 100 per cent. of efficiency is claimed. The commandant of the hospital was himself bitten by a cobra on the hospital grounds and recovered without serious symptoms. Cures have been effected even after injections made 48 hours after a bite.

No screens were seen in any hospital windows outside the jurisdiction of the U. S. In China, not a single queue was seen.

The party was entertained at various points, a magnificent ball being held in Manila, and brass bands were in evidence at several places. The ship was met by an aviator in San Francisco Bay, who dropped an invitation from the Mayor for an automobile ride about the city and a luncheon.

THE WASSERMANN REACTION OF INFANTS AND CHILDREN. A CLINICAL STUDY. CHURCHILL—*Am. Jr. Child. Dis.* Vol. 13, No. 1.—Churchill had 102 cases picked at random in his hospital work, the age ranging from three days to 12 years. One hundred and eleven tests were made, of which twelve were of the spinal fluid. Thirty-nine gave positive reaction and 62 negative reaction, a positive reaction of 38 per cent. None of these cases entered the hospital with a diagnosis of syphilis.

He collected his blood in a Wright capsule, using about 1 c. c. of blood. He found that in a small proportion of the cases that the spinal fluid will be negative when the blood is positive.

Various observers have shown that a positive test is obtained in from 96 to 100% of the manifest undoubted cases of syphilis in infants.

Knopfmacher and Schwalbe had 29 cases of hydrocephalus and eight (27%) gave a positive Wassermann.

Dean in testing 330 cases in a hospital found a positive reaction in 15%, and of the 54 positive ones 44 were in idiots. He also showed that the number of positive cases decreased after 16 years of age.

Churchill's cases were entered with the following classification and gave positive Wassermans:

Tuberculosis	26 cases	31% positive
Nervous diseases	16	" 52% "
Circulatory diseases . . .	16	" 43% "
Respiratory diseases . .	15	" 33% "
Digestive diseases	10	" 20% "
Osseous diseases	5	" 66% "
Miscellaneous	13	" 45% "

Resume: 38% of 101 cases gave a positive reaction.

BOB VEAL. P. A. French of Cornell, *Am. Vet. Rev.*, 1912, No. 12, reports chemic and dietetic experiments tending to overthrow the popular prejudice. Immature flesh, generally, is relatively poor in fat and, hence, rich in water and poor in other solids, but there is neither theoretic nor practical reason to condemn its use.

BUFFALO MEDICAL JOURNAL

A Monthly Review of Medicine and Surgery

EDITOR AND PUBLISHER DR. A. L. BENEDICT, 228 Summer St., corner of Elmwood Ave., Buffalo. (Address for all communications. Please make personal and telephone calls before 1 P. M.)

THE BUFFALO MEDICAL JOURNAL is the third, in age, in the western continent. It is independent but supports professional organization. As a scientific medium it is unrestricted in territory. As a news medium, it is limited mainly to the western four districts of the Medical Society of the State of New York. The co-operation of physicians is asked in securing personal, obituary and other news items. Secretaries of Medical Societies in this region are requested to send brief reports of meetings. Full transactions will be published at cost of composition.

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There are two kinds of ambition: to get the highest return for the least number of hours of work and the lowest expenditure of energy; and to give the greatest efficiency and to produce the best output. The choice between these marks the difference between the trade and the professional spirit.

To the Graduating Class

Years ago, when Associate Editor of the old, yellow-covered *Medical and Surgical Reporter* of Philadelphia, it was our custom to welcome the graduating class, in annual editorials, and to give advice, drawn largely from our own short-comings. In those days a seasonable article of this sort was possible, as the great majority of new recruits went into active practice at once, without preliminary interne service and with no delay on account of state boards. Conditions have changed for the better. Ninety per cent. of medical graduates now serve varying periods in hospitals and there is no definite season at which practice is begun. The graduates are also more mature, both in average years and in mental training, than formerly, and less in need of advice.

It is our intention, therefore, not so much to give advice, in the ordinary sense, as to mention certain conditions which may not have occurred to the medical man during his undergraduate course.

Education, general and technical, is very properly regarded as a criterion of the right to practice medicine and certain other

professions. It is not everything, however. Honesty and integrity and devotion are also important—even in a purely business way. If there were an absolutely perfect medical school, which admitted only ideally educated men and gave them perfect familiarity with medical science and art and impressed on them the fact that the preparation was perfect, the result would be disastrous. Some of the greatest men in medicine are half educated, a few even so imperfectly educated that they cannot speak or write correctly—and we do not allude to foreigners—they are graduates of schools which gave one imperfect course in didactic medicine, with some clinics and a very little laboratory training, and turned them out to practice when they had gone over this course twice in sessions of less than six months. They had no hospital experience. But, they have succeeded, both from the economic and the scientific standpoint, because they realized their own short comings and have been taking post graduate courses of twelve months, every year, in their practice, in medical meetings, in medical journals, and in their own little laboratories. Some of these men—and others—have not only schooled themselves to make up for deficiencies in their early training for a life work but in their education as well. There is a club in many cities which admits no one but a graduate of a college in the limited sense. But, in every such city, you will find an equal number of men, of every profession and business represented, who are not eligible to admission in that club, but who are equally able, of equal standing and equally well informed.

What has impressed us more than anything else regarding professional success, in either scientific or economic sense, is its independence of the perquisites and the externals supposed to foster it. You are fortunate in that youth and lack of experience are less considered by the public as drawbacks than formerly. Men of extremely youthful appearance, with incipient mustache or no facial hirsutes at all, have been highly successful. So have men of insignificant physique, sissy manners and speech, dudish clothes, effeminate habits and all sorts of physical handicaps. On the other hand, it is incorrect to imagine that what ought to be a handicap is really an advantage. Most undergraduate students, in any kind of a school, are brought up in the belief that the man of low marks will ultimately roll in wealth while his scholarly associate will pass a life of genteel poverty. So far as early school days are concerned, the studies having only a remote bearing on life work, or even for a literary college where the idler is rather apt to be so because he has family backing and potential opportunities and where the man of high percentages is so because of a special adaptability to

studies which will not be of direct service to him except as a teacher or professional scientist and because he has so little chance in life that he cannot afford to have a good time, there is something to be said as to the actuality of this notion. But, in the case of a medical school, in which scholarship is rated as nearly as is possible according to preparation for life work, we are very certain that ultimate success, even in an economic sense, will correspond fairly accurately to class standing. This opinion is based on actual investigation of the records of personal acquaintances. Of course, we do not mean to say that other factors than scholarship and especially of scholarship that can be figured in percentages, have no influence nor that the curves of class marks and of dollars of income will run parallel, but, taking groups of men of high and low standing in the medical school, the average degree of success in each group will correspond pretty closely to the group standing in college.

Contrary to the teachings of the fourth reader, we have been impressed with the fact that the average man keeps close to the intellectual and financial standing with which he starts. There are exceptions in both directions but the rule holds good. The fourth reader bases its contention largely on President Lincoln. Superficially considered, here is a typic case of a poor, handicapped youth, of the humblest parentage, reaching the height of success according to either low or high standards of judging success. But it is a mere matter of history that Lincoln belonged to one of the oldest and most aristocratic families in the country and that he simply regained and surpassed the position in life normal to his family, and which had been lost for a generation or two on account of the exigencies of pioneer life. Fortunately, there is not enough in heredity and early environment so that reasonable ambition backed by industry has not a good chance of success nor so that one may not lose an advantage with which he starts life.

There has been a great deal said as to the injustice of the failure in a practical sense of men of great ability and of the success of men who are merely bluffers. On the other hand, it has been held that practical success demonstrates whether the ability is real and whether the bluff is not merely the anticipation of a hand which the man deserves to hold and which he actually draws after the preliminary deal. We have been puzzling over these opposing explanations for some years and have not reached a conclusion that either is quite correct. Since assuming active work in connection with a medical journal, we have had a hint from a broader experience with different kinds of business men. So far as we can offer an explanation, it is this: In

every occupation, including medicine, success means getting from about five up to a hundred or more times one's average share. Hence, in every recognized and established business or profession in which one is a candidate for success there is an over-supply of men for positions. In medicine there are easily two physicians for every practice of a magnitude to represent even relative, routine success. This is not a theory, but a fact, demonstrable by statistics in two or three independent ways, each corroborating the other. The conditions are probably worse for the law, but, without attempting to give figures, it may be said that, in all professions and businesses, which are at all desirable, the strain and effort are not so much to do one's work as to get it. Hence the great majority, even of conscientious, faithful, industrious and really able men, are relatively failures. Occasionally, in our own profession, as well as in other professions and businesses, one meets a man whose work comes to him easily and without conscious effort on his part, or even without especially strict and prompt attention to duty or any high degree of satisfaction to those actually coming to him as patients, clients or customers. In business such a man is the one who does not have to advertise—for there really are such—and in medicine he is the one who has unprecedented and undeserved "luck." But the real explanation of this power of attraction remains hidden; one can say what it is not but not what the peculiar power is.

It should also be clearly recognized that medicine, like journalism, most forms of art, teaching, the ministry, etc., has only a few opportunities for such signal success as may be found in law and in many forms of business. One may count on his fingers all the medical men in the country who have won success at all comparable with dozens in every line of business. Thus when, as frequently happens, a physician seizes an opportunity accidentally thrown in his way, to enter some other line of activity, it is usually said that he has failed in medicine. The truth of the matter is that no one fails in anything, so long as he hangs onto the rope.

Another fact of importance, especially when we consider the high suicide rate of the medical profession (over 7 per cent. of all deaths), is the falsity of the old saw that "Opportunity knocks once at every man's door." The fact is that Opportunity calls every little while and that it would be most unwise to take up her first offer simply because of the belief that there will never be another such a bargain offered. And, on the other hand, it should not be refused if it is really a bargain, with the hope of beating her down to better

terms later. Opportunity may knock at your door early with a chance to secure "success" by marrying a rich girl. If you seize the chance as a matter of business, you may find that the opportunity is about the same as giving up medicine for a butler's position, with the advantage that you will eat at table with the family and the disadvantage that you will have no time off. In other cases, while the arrangement will be pleasant enough socially, the incentive to hard work will be absent and the opportunities for ultimate professional success will fritter away from mere lack of necessity. You do not imagine that the possession of money or any other good fortune implies unworthiness of either a woman or a man.

Opportunity may come in the form of a government position or that of assistant to some successful practitioner. In such a case you will have to solve the difficult problem of estimating accurately your opportunities for independent success. If you ask advice your adviser may underestimate your real chances or he may exaggerate them. Don't simply aim high. Aim to hit the mark, estimate your own projectile power as well as you can. One bit of advice may be given with assurance: Don't take any kind of a position in which you are to be "used" without definite assurance of recompense, of an adequate degree, subject, of course, to "making good." And, don't expect a genuine return from anything in which you engage simply for notoriety and prestige and not with the idea of performing a genuine and necessary work.

Distribution of Mortality

We call special attention to the table of mortality on page 47 of the *Monthly Bulletin of the N. Y. State Dept. of Health*. This table, being as accurate as can be secured and dealing with large masses of population, deserves close analysis by students of vital statistics.

As noted last year, the old fourth reader generalization about the good health and longevity of the country, and the puny, short lived city residents, is no longer justified. For Greater New York the average mortality is 1,427.8 per hundred thousand population. The mortality varies considerably in the different boroughs; is lowest where we should naturally expect, in Queens, but the highest borough mortality is found in Richmond where we should also expect the minimum. Excepting Albany, which has a relatively high mortality (2,016.3) largely because it comes about the nearest of any city of fair size in the United States to having a stationary population, the cities of the second magnitude, in the hundred thousands, average very close to the average for the whole state (1,482.2.) The rural districts, including

towns of less than 8,000, have an average mortality of 1,521.2. The small cities show a very great disparity in mortalities; in some cases high on account of large institutions, as for the insane, in some cases phenomenally low, perhaps on account of rapid increase in population by immigration, perhaps due to yearly fluctuations which are neutralized in large communities.

It requires no argument to show that the cities, on account of containing hospitals and institutions, not to mention private practitioners, to whom the most serious cases from the country tend to drift, bear a disproportionate part of the burden of mortality. For example, Lackawanna has the enormous death rate of 699.5 per hundred thousand total population, from diarrhoea-enteritis of children under two, almost ten times the average for the whole state. This is, of course, explained by the noble philanthropy for young children conducted on so large a scale. On the other hand, in spite of very obvious sanitary disadvantages, Lackawanna has a remarkably low typhoid mortality, 6.3 (11.8 for the whole state), or just one case. As a matter of fact, good many typhoid patients from Lackawanna are cared for in Buffalo and some inevitably die. On account of the disproportion in population, such cases markedly reduce the typhoid mortality for Lackawanna without conspicuously increasing that of Buffalo. Yet, in the aggregate, a third or a half of the typhoid cases treated in Buffalo come from outside, and while the mortality from this source is only 11.2, a true mortality of 8 or possibly 5, would give a very different impression and might save heavy expense for engineering.

The variation of tubercular (pulmonary) mortality from 31.3 for North Tonawanda to 314 for the Bronx is noteworthy. Doubtless the fact that the Bronx has double the mortality for tuberculosis, of Manhattan, is due to location of institutions, but the considerable variation of smaller cities, apparently not depending on this cause and certainly not on marked climatic differences may yield to careful investigation, hints as to prophylaxis and treatment.

The marked variations for pneumonia and for infectious diseases aside from tuberculosis, pneumonia and typhoid, are conspicuous for the smaller cities and are doubtless due to yearly fluctuations which are notoriously irregular.

Violent deaths are more common for the country (114.6 as opposed to 99.4 for cities), but vary from 18.6 for Johnstown with a little over 10,000 population to 226.8 for Oneonta, a trifle smaller. Translated into absolute figures of 2 and 23, the probability of chance rather than essential danger is more apparent. In fact congestion of traffic and manufacturing and railroad

industries, do not seem to have the bearing on this cause of deaths that one would anticipate.

As already stated, these statistics require careful analysis, to show why the death rate varies so remarkably. Thus analysed, very valuable information may be secured, showing how risk from different modes of death may be avoided.

TOPICS OF PUBLIC INTEREST.

BERI BERI AND UNPOLISHED RICE. Odake and Kozai claim to have solved the puzzle as to the connection between unpolished rice and beri beri. From the seed coats not only of rice but of wheat, barley, oats, etc., they have isolated an alkaloid which they call orizamine, and which they claim to be essential to health, along with the proteid and other nutritive constituents of the seeds.

LIABILITY OF DRUGGISTS. The Court of Appeals at Albany, in the case of Fanny E. Wilson of Brockport against a Buffalo druggist, has ruled that a druggist, dispensing a prepared compound, under his own label, is liable for any damages resulting from its use, in spite of the guarantee as to composition and effects given by the manufacturer. In the present instance, a blood remedy, stated to contain only vegetable ingredients, produced the well known effect of mercury in loosening the teeth. We can't say that our sympathies are either with the druggist, the patient or the manufacturer.

TO AMEND THE PUBLIC HEALTH LAW, RELATIVE TO MEDICAL LICENSES.—Introduced by Mr. Seeley, read twice and ordered printed, and when printed to be committed to the Committee on Public Health, reported favorably from said committee with amendments, and ordered reprinted as amended and when reprinted to be referred to the Committee of the Whole.

Section 1.—Section one hundred and sixty of chapter forty-nine of the laws of nineteen hundred and nine, entitled "An act in relation to the public health, constituting chapter forty-five of the consolidated laws," is hereby amended by adding thereto a new subdivision to be known as subdivision nine, and to read as follows:

9. "*Unprofessional conduct*" means and shall include the following acts or conduct by or on the part of a practitioner of medicine:

(a) *Advertising either in his own name or in the name of another person, firm, association or corporation, in any news-*

paper, pamphlet, or other printed paper or document, or [by] writing letters or causing them to be written, or employing capper, solicitor or drummer to secure patients, wherein or whereby the MEDICAL PRACTITIONER HOLDS HIMSELF OR HERSELF OUT TO CURE DISEASES OR DEFECTS OF THE SEXUAL ORGANS, OR TO CURE CHRONIC OR INCURABLE diseases, or for being employed by any person, firm, association or corporation so advertising or announcing.

(b) ANNOUNCING PROFESSIONAL SERVICE WITHOUT COMPENSATION OR *the acceptance of fees in consideration of the assurance that an incurable disease may be permanently cured.*

(c) *Wilfully betraying a professional secret.*

(d) *Habitual drunkenness or addiction to drugs.*

(e) *Dividing or promising to divide a fee with another physician, or accepting a divided fee, without the knowledge of the patient or the person paying such fee.*

[The employment of any capper, solicitor, or drummer for securing patients, or the division of fees or promise of division of fees or the payment of money to any person or persons or of any other valuable thing in return for service in securing patients.]

(f) ANY OTHER ACTION NOT CONSONANT WITH GOOD MORALS, OR ANYTHING DONE OR SAID DETRIMENTAL TO THE HEALTH OR MORALS OF OTHERS.

* * * * * The regents may revoke the license of a practitioner of medicine, or annul his registration, or do both, *or suspend a practitioner of medicine from the practice of his profession for any length of time*, in any of the following cases: * * *

(c) *Who is guilty of unprofessional conduct, as defined in this article; or* * * *

This bill is opposed by the Western N. Y. Medical Society, President, Dr. R. A. Toms of Kenmore; Secretary, Dr. E. L. Downey, Middleport. While its general objects are laudable, it is also a general principle that it is unwise to attempt to make men gentlemen by law and that, in so doing, grave injustice is liable to occur to men of good intentions and to those committing very minor indiscretions, by putting punitive powers in the hands of men not trained or authorized to perform judiciary functions. And, as worded, the bill might be interpreted so as to interfere with perfectly legitimate methods of publicity and distribution of information, such as contributing to periodicals, sending reprints, use of signs, etc.

SHEPPARD AND ENOCH PRATT HOSPITAL, of Towson, Md., Edward N. Brush, M. D., Superintendent, will celebrate its 60th anniversary just before or after the Congress of American Physicians at Washington, in May.

THE BABIES MILK DISPENSARY of Buffalo, 1911, dispensed 22,000 quarts at a cost of \$6,500; in 1912, 42,000 quarts at a cost of \$10,000. It is hoped that the growth of the work will further diminish the cost per quart, which, as may be noted, was nearly thirty cents for 1911 and a little less than twenty-five cents in 1912. Support is urgently needed. Contributions may be sent to Miss Minerva Newhall, Secretary, 241 Swan street.

THE HOSPITAL AID ASSOCIATION of Lockport has raised \$3000 toward a new building.

"ALL POISONS. All of our so-called curative agents (drugs) are poisons and, as a consequence, every one diminishes the vitality of those who take them."—Prof. Alonzo Clark, M. D., New York College of Physicians and Surgeons.

This is certainly true of most alkaloids and glucosides, and of many metals and metaloids, commonly classed as alteratives. But, is it true of drugs logically used to restore an equilibrium between acidity and alkalinity, of mineral oil and agar-agar and other substances acting mechanically on the bowel, of ferments properly used to supply deficiencies, of iron, iodothyrene, and other extracts of secreting organs? And, in the practical sense, is it true of cathartics, internal antiseptics, and various drugs employed to restore normal tone to the heart and vessels, of strychnine when reflexes do not follow stimuli as they normally should and of a host of other drugs, rationally used? Disease consists largely of chemic abnormalities. It is inevitable that it must be combated by chemical agents, in other words—drugs.

OPEN AIR SCHOOLS. New York has fourteen, with a capacity for 626 children. All other states have forty-one, with a capacity for 1229. Just how the "capacity" of an open air school is so closely limited, we do not understand.

TALL MAN. Julius Laubach of Brussels, 7 feet 2 inches high, has come to Chicago for an operation on his legs, which are bowed, following a fall while ringing a bell in the cathedral at Cologne. He estimates that his normal height should be 7 feet 6 inches.

AN ADULT PARTHENOGENETIC FEMALE FROG. On February 28, a reception was given by the Manhattan Medical Society, New York, to Dr. Jacques Loeb, of the Rockefeller Institute for Medical Research, at which he spoke on "Some Recent Experiments in Artificial Parthenogenesis." He is reported to have stated that a female frog, thus produced from an artificially fertilized egg, had reached adult life and, on examination after accidental death, had been found to have normally developed organs throughout, including ovaries containing apparently normal ova.—*Boston M. and S. Jour.*

A HEAVY WOMAN. Melissa Cooper, a negress, who died on March 15, at Grayson, Gwinnett County, Ga., is said to have weighed 613 pounds at the time of her death. Presumably some pituitary lesion accounted for this phenomenon.—*Boston M. and S. Jour.*

GRADUATE NURSE WANTED AS HOSPITAL SUPERINTENDENT IN MADURA, SOUTH INDIA. Strong constitution, good education, good hospital record, executive ability and deep spiritual life are the requirements. The salary is \$500 a year and quarters, but not board, which costs about \$13 a month. Permanent appointees receive \$250 as outfit allowance and traveling expenses, allowance for language teacher and vacation expenses. A vacation of about a month is allowed each year and a furlough of one year in seven. The hospital has 50 beds, and about 12,000 resident and out-patients are treated annually. Inquire of Mr. Wilbert B. Smith, 600 Lexington avenue, New York

SMALL POX. Eight cases have developed among the employes of a railroad shop in Elmira.

DEATH OF QUADRUPLLET. The *Boston M. and S. Jour.*, August 15, 1912, noted the birth of quadruplets in Dorchester, Mass. All four survived till March 21, 1913, when the first born, a girl, died of broncho-pneumonia. This is regarded as the only recorded instance of the survival of quadruplets for any considerable period.

OPPOSITION TO NIAGARA COUNTY TUBERCULOSIS HOSPITAL. Dr. John A. Rafter, Mayor of N. Tonawanda, is opposing the efforts of the State Charities Aid Association, on the ground that the climate and low altitude of Niagara County are not adapted to the treatment of this disease. The control of the tuberculosis problem has, of late years, gotten somewhat out

of the hands of the medical profession and there is a possibility of advancing the spark of enthusiasm beyond the supply of accurate knowledge so as to cause knocking. We have personally seen the popular and, to some degree, professional notion regarding the climatic treatment of tuberculosis, box the compass from the warmth, moisture and low altitude of Florida, to the warmth, dryness and fairly high altitude of the western plateau, and then to the cold, more or less humid and high altitude of the mountains of New York, North Carolina, etc. We have also seen cases recover in their original environment. Hence, we have no disposition to take sides in this dispute. But Dr. Rafter has done a great service in raising a strictly medical issue just at the time when the campaign for county and other local tuberculosis hospitals has begun to be successful and is spreading over the country by the contagion of example. Hitherto, the obstacle interposed by officials has been economic, either in the narrow sense of hesitating at an expense, or in the broader sense of discouraging public assistance; or the economic problem of the relative merits and expense of local and of state care has been considered, or there has been a dispute as to the relative merits of different sites. While Dr. Rafter's attitude will be a disappointment to many of the lay workers in this cause, and is opposed to individual professional opinions, the question which he raises is of too great importance and too far reaching to be ignored. It should be thoroughly discussed and settled as definitely as possible by present information, before a universal system of local care is instituted. The delay will cause some individual sacrifice but, in the long run, it is worth while to be very sure that we are right before we go ahead any farther.

COMPULSORY VACCINATION has been rigorously carried out at Niagara Falls, Ont., on account of a threat of quarantine, if necessary enforced by troops, from the Provincial Board of Health. Dr. Wilson and his associates on the municipal health board resigned on account of lack of co-operation by the aldermen, and Dr. Harris, Harry Hobson, C. V. Bradford and E. Misener, were appointed on the new board. On account of the secretion of some cases of smallpox, a house to house inspection has been made. A fair building has been used as a quarantine hospital.

RADIUM. The London *Times* estimates the total production to date at about one ounce.

PRIZE ESSAY. The Society of Hygiene of Childhood of Paris announces a competition, closed December 31, 1913. The question to be discussed is "The Place Which Ideas of Child Culture and Hygiene Ought to Occupy in Modern Education." Manuscripts may be written in French, German, English, Italian or Spanish. They must bear a device or motto repeated on a sealed envelope containing the name and address of the competitor, and every competitor who discloses his identity will be disbarred. Essays will not be returned or even printed in their entirety and must not be published by their authors. The Society reserves the right to draw upon the best for material for a pamphlet in an educational campaign. The prizes will be awarded at the annual meeting of 1914, and will consist of medals of gold, silver gilt, silver, bronze and honorable mention. Address the President de la Societe d'Hygiene de l'Enfance, 10, rue St. Antoine, Paris 4e.

MEDICAL MISSIONARY. A physician with a college education and otherwise well qualified as a Christian gentleman, is needed at Beira, Portuguese East Africa. The successful applicant will be sent to London for a course in Tropical Medicine, then to Lisbon to learn Portuguese. The native language is said not to be difficult to acquire. A gasoline launch will be provided for missionary tours on the rivers. The climate is rather bad, so that two month's vacation will be allowed yearly at Mt. Silinda or elsewhere, and a year's furlough will be allowed every five years. Address regarding this and other missionary openings, Mr. Wilbert B. Smith, 600 Lexington avenue, New York.

STERILIZATION OF THE UNFIT. Indiana, Washington, Colorado, Connecticut, Nevada, Iowa, New Jersey and New York have all passed laws which provide for some form of sterilization of defectives and of certain criminal types. In Pennsylvania, a similar bill was vetoed by the Governor, and in Kansas and Nebraska the experiment with such methods of dealing with sexual offenders has been temporarily abandoned. The New Jersey law has been very carefully planned to avoid abuse, but has not been in effect long enough to warrant conclusions as to its practical outcome. Indiana has given the sterilization plan a seven years' trial, and in the reformatory at Jeffersonville about three hundred men have been thus operated on.

LEGISLATION REGARDING ANIMAL EXPERIMENTATION. The press report, which was noted in the March issue, to the effect that the McClelland Anti-vivisection bill was killed in the New York Senate Judiciary Committee, by a vote of 6 to 4, was incorrect in two important particulars. First, the bill was not killed in committee but was reported favorably, April 3, by a vote of 9 to 4; secondly, it is not an anti-vivisection bill, but one whose intention is to secure a reasonable supervision of animal experimentation. A similar bill has been introduced in the Assembly by Mr. McKee. These bills have the support of the Society for the Prevention of Abuse in Animal Experimentation, President, Dr. Albert Leffingwell of Aurora, N. Y., Treasurer and Counsel, Frederick P. Bellamy, Esq., 204 Montague street, Brooklyn. This organization is in no sense one of anti-vivisectionists, although it naturally does not meet with favor from those who oppose all legislation on this subject nor from those who desire special privileges for institutional workers instead of affording equal rights and equal control to all legitimate students of physiology, pharmacology and other sciences requiring animal experimentation. It is desired that physicians interested, communicate with Mr. Bellamy. It should be clearly understood that the editor, in making these notices, and in holding the opinion that some legislative control of vivisection is inevitable and based on public sentiment and precedent along other lines, by no means advocates arbitrary restriction of scientific advance. Judgment on the merits of a bill requires not merely such reading as applies to ordinary scientific articles, but keen scrutiny, with abundant legal experience to guard against future interpretation contrary to the spirit apparently expressed.

OPENINGS FOR PHYSICIANS. If any young doctor finds that he is the victim of the inexorable law of supply and demand, we would advise him to seek a position where a genuine demand exists. Viola, Del., needs a physician. This is a town of fifty families, but there are two other villages within two miles and two more within three miles, and a thickly settled farming district with an aggregate population of 2000. Inquiries may be addressed to Mr. Henry De Blois.

Rural Grove and Sharon, N. Y., have recently lost their only physicians by death, and there are over a hundred post offices in New York where there is no physician at all. Many of these, with the surrounding country in a radius no greater than is included in an ordinary city practice, have populations several times as large as the average tributary to each physician (about 650.)

OBESITY AND HIRSUTIES. Miss Emma Groves died at Brunswick, Me., April 3, of pneumonia, aged 46. She was five feet six tall, five feet eight in waist measure, weighed 507 pounds and had a full beard.

ELECTRICITY CHARGES REDUCED. The State Public Service Commission, after thorough investigation, has ordered a conservative reduction in rates for Buffalo, amounting to about 25-30% for the average small consumer. The importance of this is not in the comparatively small saving for present consumers but in the anticipated extension of the use of electricity which will undoubtedly render a further reduction possible. It should be clearly understood by purveyors of public utilities that the sentiment "The greatest good to the greatest number," means, first, "A greater use by a greater number," and, secondly, "A greater profit from a cheaper service." Cheap electricity means not only more business to the community and, hence, greater prosperity, but it means cleanliness, saving of time, better health by eliminating carbon dioxide due to the older method of producing heat and light by oxidation, and with due care in distributing currents, fewer fires. It is only one or two moves from cheap electricity to a lower death rate.

THE NATIONAL HIGHWAYS COMMISSION (Charles Henry Davis, President pro tempore, S. Yarmouth, Mass.) is attempting to secure public support for a bill establishing a national commission of highways. A map has been prepared, indicating various trunk routes of travel through the U. S. It is proposed to spend about \$50,000,000 in five annual instalments, to assist the states in developing a system of good roads aggregating 50,000 miles. Private contributions are also solicited in sums of from fifty cents or a dollar a year from subscribing associate members up to a single payment of \$25,000 for the founder. It is estimated that there are about 25,000,000 farm horses and mules, 1,600,000 horse-drawn vehicles and 850,000 automobiles in the United States. The cost of construction of roads is estimated at five to twenty thousand dollars a mile (brick). The ultimate economy of the expense is shown. While we approve of the plan, with due regard for economy and proper distribution of the expense, we may say that the argument as to the diminished cost of supplies from the country by good roads, has not been verified in experience in Buffalo. Moreover, the general use of the automobile is not for business but for pleasure, and it has appreciably increased the difficulty of doing business in the summer by tempting business men away from their work.

MEDICAL EXPERT TESTIMONY. The Committee on Medical Expert Testimony of the New York State Medical Society has caused to be introduced into both houses of the State Legislature the following proposed bill:

"An Act to amend the judiciary law, in relation to examining physicians.

"The People of the State of New York, represented in Senate and Assembly, do enact as follows:

"Section 1. Article two of chapter thirty-five of the laws of nineteen hundred and nine (1909) entitled 'An act in relation to the administration of justice, constituting chapter thirty of the consolidated laws,' is hereby amended by adding at the end thereof a new section, to be section thirty-one, to read as follows:

"Section 31. *Examining Physicians.* In a criminal action or proceeding or in a special proceeding instituted by the state writ of habeas corpus or certiorari to inquire into the cause of detention, in which the soundness of mind of a person is in issue, the court in which or the judge or justice before whom the action or special proceeding is pending may appoint not more than three disinterested competent physicians to examine such person as to his soundness of mind at the time of the examination. Any examining physician may be sworn as a witness at the instance of any party to the action or proceeding. The compensation of such examining physician for making such examination and testifying when certified by the presiding judge or justice of the court or judge or justice making the appointment, shall be paid out of any funds available for the payment of and in the same manner as other court expenses.

"Section 2. This act shall take effect immediately."

This bill has been most carefully drawn by an expert on constitutional law at the instance of the committee. The expert who drafted the bill has taken into account the laws of all the other states and the decisions regarding them where declared unconstitutional.

It is his opinion that this bill will stand the constitutional test. He further believes that it is wiser to use it as an amendment to the judiciary law than to have it enacted as an entirely new legislation. It is sincerely hoped by the committee of the State Society that the profession of the State of New York will endorse this bill and stand back of it with a solid front. The abuses of Medical Expert Testimony have been and are, shameful. The committee deem it the better part of wisdom to confine its efforts to having the bill enacted covering only criminal cases.

The bill was introduced in the Senate on March 17th by Senator Walters of Onondaga, and in the Assembly on the same date by Assemblyman Daly.

RAISE EDUCATIONAL STANDARD. The Association of American Medical Colleges, which met in Chicago in February, adopted a resolution that hereafter students in schools belonging to the Association of American Medical Colleges must take a five-year course. There are now thirty colleges which enforce a two years' collegiate course preparatory to admittance to a medical college, and five other colleges have adopted the same rule, effective January 1, 1914. After January 1, 1914, a year of college work in physics, chemistry and a modern language will be required. Special standards for clinical work were also adopted at the meeting.

QUADRUPLTS. Mrs. Eisenhower of Scarsdale, N. S., is said to have given birth to three girls weighing six pounds each and a boy weighing five and one-half pounds, early in March. Allowing for placenta and liquor amnii, this means a uterine content of 27-30 pounds. Scarsdale is not listed in Polk, so we cannot verify the report.

101 TUBERCULOUS CATTLE have recently been condemned by Dr. H. S. Wende, State Veterinarian for Western New York, at Springville, out of 141 examined. It would be interesting to trace the effects in the consumption of milk. (No pun intended.)

THE GLASGOW LISTER WARD AND MUSEUM. As a memorial to the late Lord Lister, and as a means of perpetuating his memory in a way that it is hoped will prove both interesting and instructive to every member of the medical profession for all time to come, one of the wards in the Royal Infirmary, Glasgow, in which he worked out and first put into practice the principles of Antiseptic Surgery, is to be reserved and utilized in the following way. One part of the ward is to be refurnished as it was in his time with such objects as it may be possible to acquire; while the other part is to be made into a Museum for the exhibition of anything associated with the life and work of the great master.

It is, therefore, asked that any who may have letters, pamphlets, books, or other objects of direct personal association with Lister and his work will either present or loan them to the Museum.

Professor John H. Teacher, M. D., Hon. Curator of the Museum, will be pleased to receive any objects addressed to him at the Royal Infirmary, Glasgow, Scotland.

The names of all donors or senders of objects are to be affixed to the exhibits.

Dr. A. Ernest Mayland, 12 Blythswood Square, Glasgow, is Chairman of the Museum Sub-Committee.

EXAMINATIONS FOR ASSISTANT SURGEONS, PUBLIC HEALTH SERVICE, will be held at various places, May 5 and June 9. Candidates should address the Surgeon-General at Washington, immediately, for particulars.

SOCIETY MEETINGS

DR. W. GILMAN THOMPSON of New York lectured on Industrial Diseases of New York State, with lantern demonstration, before the Buffalo Academy of Medicine on April 8, and before the Rochester Academy of Medicine on April 9. A dinner in his honor was given at the Buffalo Club and the Rochester Club, respectively, preceding the lecture. In Buffalo, representatives of the Tuberculosis Association and the Life Underwriters' Association of Buffalo were present. The dangers of the strenuous life of a lecturer were not mentioned by the distinguished guest. Dr. Thompson's paper will be published in a future number of this Journal.

THE I. C. I. CHAPTER OF THE NU SIGMA NU FRATERNITY held open house to its active and alumni members at its home, 246 Elmwood avenue, Buffalo, April 7.

THE ELMIRA ACADEMY OF MEDICINE, at its meeting April 2, endorsed the reappointment of Dr. Eugene H. Porter as State Commissioner of Health, and memorialized Gov. Sulzer to that effect. The reappointment of a meritorious official, without regard to politics, is the best way to secure efficient service and to remove the odium of partisanship from our political system.

THE BUFFALO ASSOCIATION FOR THE RELIEF AND CONTROL OF TUBERCULOSIS has recently elected the following officers: President, Irving S. Underhill; Vice-Presidents, E. J. Barcalo and Mrs. C. J. Hamlin; Treasurer, Harry T. Ramsdell; Directors, Hugh Kennedy, Thomas B. Lockwood, Frederic Almy, Dr. Burt J. Maycock, Dr. Francis E. Fronczak, Theodore M. Pomeroy, Proctor Carr, E. J. Barcalo, William E. Hill, Mrs. James W. Putnam, Mrs. Charles E. Baker, Hugo A. Brown, Miss Mary L. Morgan.

The report of John R. Shillady, executive secretary, shows that during the summer 165 patients were cared for at the open

air camp. Fifteen children were cared for a day and night, with special nurse in charge.

THE ALUMNI ASSOCIATION OF THE COLLEGE OF MEDICINE OF SYRACUSE UNIVERSITY will be held on the afternoon of June 11, the dinner being held in the evening. Commencement exercises of the entire university will be held June 12.

THE FOURTH INTERNATIONAL CONGRESS OF SCHOOL HYGIENE will be held in Buffalo, August 25-30. The officers are as follows: President, Charles W. Eliot, President Emeritus, Harvard University; Vice-Presidents, Dr. William H. Welch, Professor of Pathology, Johns Hopkins University; Dr. Henry P. Walcott, Chairman Massachusetts Board of Health; Honorary Vice-Presidents, Dr. Abraham Jacobi, Professor Emeritus, College of Physicians and Surgeons, Columbia University; William H. Burnham, Ph. D., Professor of Pedagogy and School Hygiene, Clark University; His Eminence, James Cardinal Gibbons, Archbishop of Baltimore; Philander P. Claxton, A. M., Litt. D., United States Commissioner of Education; John H. Finley, LL.D., President of the College of the City of New York; Adelbert Moot, Regent of University of State of New York; Sir James Grant, M. D., K. C. M. G., Ottawa; Dr. M. Uribe Troncoso, Chief, Department of School Hygiene, Mexico, D. F.; Dr. Rupert Blue, Surgeon General, U. S. Public Health and Marine Hospital Service; Dr. H. M. Bracken, Secretary and Executive Officer, Minnesota State Board of Health; Dr. Andrew S. Draper, Commissioner of Education, State of New York; Dr. Theobald Smith, Professor of Comparative Pathology, Harvard Medical School, Boston, Mass.; David Starr Jordan, President, Leland Stanford, Jr., University; Dr. Henry R. Hopkins, Professor Emeritus of Hygiene, University of Buffalo, representing Buffalo Academy of Medicine; Dr. Woods Hutchinson, representing National Education Association; Secretary--General, Dr. Thomas A. Storey, Professor of Hygiene, College of the City of New York, New York City, U. S. A.; Treasurer-General, John H. Lascelles, Vice-President, Marine National Bank, Buffalo, New York, U. S. A.; Executive Committee, Dr. Arthur T. Cabot, Chairman, Fellow, Harvard College (deceased); Dr. Francis E. Fronczak, Commissioner of Health, Buffalo, N. Y.; Dr. Robert W. Lovett, Assistant Professor of Orthopedic Surgery, Harvard Medical School; Henry P. Emerson, Superintendent of Education, Buffalo, N. Y.; Dr. Luther H. Gulick, Director, Department of Child Hygiene, Russell Sage Foundation, New York City; Harold J. Balliett,

City Clerk, Buffalo, N. Y.; Dr. David L. Edsall, Professor of Preventive Medicine, Harvard Medical School, Boston, Mass.; John H. Lascelles, Vice-President, Marine National Bank, Buffalo, New York, U. S. A.; Joseph Lee, Boston, Mass.; Dr. Thomas A. Storey, Secretary.

There is now being arranged a comprehensive program of papers and discussions covering the entire field of school hygiene. There will be scientific exhibits, representing the best that is being done in school hygiene, as well as commercial exhibits of practical and educational value to school people. Nor will the entertainment of the delegates in any way be a minor feature. Plans are being made for a series of social events, including receptions and a grand ball, a pageant in the park, and excursion trips to the great industrial plants of Buffalo, as well as to the wonders of Niagara Falls and the Rapids. Buffalo itself has just taken up a collection of \$40,000 for the purpose of covering the expense of the Congress. Delegates will attend from all the leading nations, from every college and university of note in this country, and from various other educational, scientific, medical and hygienic institutions and organizations. The Congress is further open to all persons interested in school hygiene. Membership may be secured on the payment of a five dollar fee. Applications should be sent to Dr. Thomas A. Storey, College of the City of New York, New York City.

PRELIMINARY PROGRAM of the Sixteenth Annual Meeting of the American Gastro-Enterological Association, Washington, D. C., May 5 and 6, 1913: President's Address, "Remarks on the Role which Functional Disorders Play in the Pathology of the Stomach," J. Kaufmann, New York City; "A Contribution to the Bacteriology of the Duodenum," Arthur F. Chace, New York City; "The Beneficial Effect of Duodenal Alimentation in Cirrhosis of the Liver," Max Einhorn, New York City; "Polyadenoma Gastrica," Jesse S. Myer, St. Louis, Mo.; "Report of a Case of Chronic Stenosing Gastritis," H. W. Soper, St. Louis, Mo.; "Contribution to the Significance of Abdominal Pain," L. Kast, New York City; "Fluoroscopic Examination Versus Clinical Methods in the Diagnosis of Gastric Diseases," John Dudley Dunham, Columbus, O.; "The X-ray Method in Diagnosis of Peptic Ulcer," Franklin W. White and Ariel W. George, Boston, Mass.; "Radiological Studies of the Ileo-cecal Region," A. Holding, New York City; "Gastro-Intestinal Stasis," J. A. Lichty, Pittsburgh, Pa.; "The Frequency of the Transition of Ulcer of the Stomach into Cancer," J. Friedenwald, Baltimore, Md.; "A

Clinical Study of the Relation Between Gastric Ulcer and Gastric Cancer," Frank Smithies, Rochester, Minn.; "Section of the Diaphragm as an Aid in the Exposure of the Thoracic Aorta," Fred Murphy, St. Louis, Mo.; (a) "Esophageal Symptoms in Gastric Disease" (b) "The Employment of Carmin in Gastro-Intestinal Diagnosis," Seymour Basch, New York City; "Lymphoedema: Elephantiasis, Ascites, Obstruction at or near Receptaculum, Non-Filarial," A. L. Benedict, Buffalo, N. Y. All sessions at the New Willard Hotel. Physicians are cordially invited.

HISTORICAL MEDICAL EXHIBITION, LONDON, 1913.—Among other historical medical objects of exceptional interest that have been secured for the Historical Medical Exhibition, organized by Mr. Henry S. Wellcome, and which will be opened in London during the meeting of the International Medical Congress in the coming summer, are many relics of Dr. Edward Jenner, the discoverer of vaccination. These include the original lancets and scarifiers he employed during his first experiments, his case and account books, his snuff box, medicine chest and many other interesting articles. A large collection of autograph letters of Jenner's, some of unique interest, have also been loaned, together with the arm chair from his study and in which he died. Other objects connected with the life of Jenner are also to be exhibited, including many valuable portraits of himself and family, painted at different periods, the illuminated addresses presented to him together with the freedoms of the cities of London and Dublin, also medals, and other documents of special interest.

Concerning the history of anaesthesia, many interesting relics are to be exhibited, beginning with the original autograph journal and manuscripts of Henry Hill Hickman, F. R. C. S., the discoverer of the application of the principle of anaesthesia by inhalation for surgical operations, which he proved by actual experiments on animals in 1823. Personal relics of Sir James Simpson, and some of the earliest forms of apparatus for administering chloroform and ether will constitute an exhibit of more than usual interest.

Those who may possess any objects of a similar character connected with the history of medicine and the allied sciences, and who would be willing to loan them, should communicate with the Secretary, 54A, Wigmore street, London, W., England, who will be pleased to forward a complete illustrated catalogue to anyone interested.

AN ENGLISH-SPEAKING CONFERENCE on the Prevention of Infant Mortality will be held in Caxton Hall, Westminster, London, August 4th and 5th. The meetings will be held under the auspices of the (British) National Association for the Prevention of Infant Mortality and the Welfare of Infancy, under the patronage of the King and Queen, and will convene immediately preceding the opening of the International Medical Congress.

Tentative program: The Responsibility of Central and Local Authorities in Infant and Child Hygiene, The Administrative Control of the Milk Supply, The Necessity for Special Education in Infant Hygiene, Medical Problems in Infant Nutrition, Ante-Natal Hygiene.

The American Committee, in charge of the part to be taken by the United States and Canada, will furnish information to those desiring to attend the conference. Dr. Henry L. Coit, Chairman, 277 Mt. Prospect avenue, Newark, N. J.; Dr. Philip Van Ingen, Secretary, 125 East 71st street, New York City.

STATE SOCIETY MEETING. The preliminary program was received just too late for our April issue and the May issue will be on the press during the meeting. By June the news items will have been known to the great majority of our readers and the scientific papers will probably have been begun in the State Journal. It is, therefore, from no lack of interest in or loyalty to the State Society that our references to the meeting have been limited to a notice on the cover and a brief allusion in the department of Society Meetings, in our April issue. On the contrary, it seems fairer both to our own subscribers, all of whom we wish to be affiliated with the professional organization of the county, state and nation and most of whom are, and to the State Journal not to duplicate the contents of the latter. The Rochester men are making elaborate preparations for the meeting and we wish them and their guests good weather, a large attendance and an enthusiastic professional spirit such as will justify other cities of the state in further departures from the precedent of holding meetings at the Capital.

THE ALUMNI ASSOCIATION OF THE UNIVERSITY OF MICHIGAN of Rochester, held a large and enthusiastic dinner-meeting last month, under the presidency of Dr. John R. Williams. Music and two "playettes" enlivened the occasion. Dr. Victor C. Vaughan, Dean of the Medical Department, spoke before the City Club in the afternoon, on the Prevention of Disease, discussing both infections and those due to general developmental

factors, as feeble-mindedness. He approved the policy of sterilizing degenerates and of facilitating public hygienic control by division into districts, as contemplated for New York and Michigan.

THE MEDICAL AND SURGICAL LEAGUE OF BUFFALO, at their April meeting, listened to an interesting paper by Dr. Edmund Reimann, entitled, "Cough as a Symptom." Nominations of officers for the ensuing year were made.

BUFFALO SOCIETY OF SANITARY AND MORAL PROPHYLAXIS met April 18 to take action in regard to Senate Bill No. 81, "An Act to amend the domestic relations law in relation to the issuing of marriage licenses." This act is embodied in twenty or thirty lines, and the gist of it is that "No license to marry, referred to in the preceding section shall be issued except after each party to the contract has presented to the license clerk a certificate from a doctor of medicine duly authorized to practice medicine in the State of New York, stating that said doctor of medicine has examined such applicant for a marriage license, and that said applicant is not afflicted with any venereal disease."

The drift of the discussion was to the effect that this proposed law was not perfect, and, in fact, it would be difficult to frame any bill which would fulfill all the desired conditions. But on the other hand the educational value of any such law would be enormous if only to teach the public the necessity of guarding against these diseases and their terrible results in the acquired and inherited forms. Several eminent clergymen also joined in the discussion, and at the end the following resolution was unanimously adopted:

"That it is the sense of this society that we favor Senator Duhamel's Bill No. 81, and urge our representatives in the Senate and Assembly to use their utmost endeavors to have this bill reported favorably, and then further its passage. Also, that steps be taken to acquaint the public with the provisions of this measure in order that it may secure the general approval which it deserves."

It is interesting and gratifying to observe the increasing interest which doctors, clergymen and the public in general are taking in this matter of preventing one of the most terrible scourges to the human race.

Every doctor who knows a legislator should take the first opportunity to preach the gospel of reform. If the bill does not become a law this year, it must pass later. The medical profession and enlightened public sentiment will demand it.

PERSONALS.

Dr. L. E. Curtice of Buffalo will remove May 1 to 346 Massachusetts street.

Dr. Joseph Roby of Rochester moved April 1 to 234 Culver Road, corner of Park avenue.

Dr. Edward L. Hanes of Rochester has moved to 748 East Main street. His practice is limited to Nervous and Mental diseases.

Dr. A. W. Booth of Elmira has returned from a month's trip to Cuba and Panama.

Dr. Charles Haase of Elmira attended the meeting of the Metropolitan Medical Examiners in Utica in March.

Dr. E. R. Linklater of Buffalo will move May 1 to 233 W. Utica street.

Dr. George E. Fell of Buffalo has moved to 802 D. S. Morgan Building.

Dr. Herman E. Hayd of Buffalo returned early in April from a Panama trip.

Dr. William Stanton, Webster, N. Y., U. B., '89, announces his removal, April first, to his new residence at Main street and Dunning avenue, where he has a five-room office, including operating room and laboratory, equipped with modern conveniences for medical and surgical work.

Dr. Joseph Brennan, a former Buffalo resident, has returned from New York and has located at 399 Delaware avenue.

Dr. W. E. Lundblad, Director of the Steuben County Bacteriologic Laboratory, has resigned.

Dr. H. M. Cowper of Buffalo has moved to the Vedder house, 543 Franklin street.

Dr. Thomas Walsh of Buffalo has returned from an extended trip to Europe.

Dr. Flavel B. Tiffany of Kansas City has returned from a trip around the world. He made a special study of the Indian operation for cataract with the originator, Col. Smith of Bombay.

Dr. Lee Adrian Whitney of Rochester announces the removal of his office to 255 Alexander street.

Dr. J. C. Clemesha of Buffalo has gone to Europe.

Dr. S. Y. Howell of Buffalo, after returning from Panama, will make a tour around the world.

Dr. Mabel Flood of Elmira visited Dr. Regina Flood Keyes of Buffalo late in March.

Dr. John H. Grant, formerly of Buffalo, has recently been admitted to membership in the Medical Society of the County of New York.

Dr. Zoena M. Sutton of Tonawanda is studying at the College of Missions in Indianapolis, in preparation for work in India.

Dr. W. H. Annowski of Buffalo returned from Florida in March and is now studying in New York City.

Dr. Joseph S. Lewis of Buffalo has removed to 11 Irving Place.

Dr. James F. Rice of Buffalo has moved to 441 Elmwood avenue.

The Pennsylvania State College Alumni Association of Western New York held its banquet in Buffalo, March 28, Dr. H. H. Glosser presiding. The President of the College, Dr. Edwin E. Sparks, was present.

Dr. Roland Meisenbach of Buffalo has recently returned from a western tour, including Kansas City and St. Louis. In Kansas City he held a clinic and in the evening spoke to the Jackson Co. Medical Association on the Sacro-Iliac joint. In St. Louis he spoke before the St. Louis Medical Society on "Abbott's New and Rapid Method of Correcting the Fixed Types of Lateral Curvature." During his stay in St. Louis a number of banquets were given in his honor.

Dr. Russel H. Wilcox of Delaware street, Tonawanda, who was recently appointed as second lieutenant of Company K, 74th Regiment, was sworn in April 14.

Dr. Louis Hartman, Surgeon of the N. Y. C. & H. R. R. R. at Syracuse, has recently moved to Detroit.

Dr. Leighton R. Cornman of Rochester has moved to 266 Alexander street.

OBITUARIES.

Dr. Benjamin Van Etten Dolph (not listed in State Directory) died in Sodus, March 26, aged 38.

Dr. George McClellan, Jefferson, 1870, the noted anatomist and surgeon, died at his home in Philadelphia, March 29, of heart disease, aged 64. He was a nephew of General McClellan. We had the pleasure of attending his clinics at the Blockley Hospital in 1888-9.

Dr. Lewis H. Hazeltine of Clarksville, Mich., (not listed in Polk) died in April. He was born and reared in Jamestown, N.Y.

Dr. Morris D. Rouse died April 9, at his home, 72 Mariner street, Buffalo, aged 76. He had not been in practice for some years.

Dr. Norman K. MacLeod, Toronto, 1903, died at his residence, 148 Delaware avenue, Buffalo, April, of pneumonia, having been ill two weeks. He was born in Brantford, Ont., 34 years ago, went to Melbourne, Australia, when a boy, and graduated from Melbourne University. Returning to Canada, he studied medicine at the University of Toronto, and after graduating in medicine went to London for post graduate work, studying under Sir A. E. Wright and others and devoting himself especially to research in regard to bacterial vaccines, though broadly interested in pathology and applying his special skill along practical lines. He joined his brother, Dr. James MacLeod, in Buffalo in 1907, and soon became well known, not only for his scientific research and by his professional acquaintance, but for his general scholarship and his charming character. In the best sense of the words, he was socially active and deservedly popular, though a hard worker in his laboratory and having the rare ability to combine technical science with clinical acumen.

Dr. Roland G. Curtin of Philadelphia, University of Pennsylvania, 1866, died March 14, aged 74. He was Naval Store

Keeper in Philadelphia during the Civil War and was Assistant Medical Director of the Centennial Exposition of 1876. He was well known as a clinician, many of our readers having had the privilege, which we enjoyed, of attending his clinics at the Blockley Hospital.

Dr. Prince A. Morrow, N. Y. University Medical College, 1874, died suddenly in New York, March 17, aged 66. He was well known as a dermatologist and for his work in genito-urinary diseases, being of a generation when these branches had not been separated so sharply as at present. His writings on the social aspects of venereal diseases were also valuable. Some years ago he made a special study of leprosy at Molokai, involving a degree of heroism none the less creditable because no unfortunate result occurred.

Dr. Christopher R. Finnegan (college data not available) died in Buffalo, March 9, aged 28.

Dr. Myra Amanda Gillette; Hahnemann of Chicago, 1886, died at her home in Medina, March 10, aged 59, of tuberculosis.

Dr. Daniel E. Lake, Ecclectic of Philadelphia, 1871, died in Fulton, Oswego County, New York, March 1, aged 75.

Dr. James A. Egan, N. W. University, 1893, for sixteen years Secretary of the Illinois State Board of Health and well known for his good work along sanitary and educational lines, died in Springfield, Ill., March 30, aged 53, of nephritis.

Dr. Sylvester Emery Strong, N. Y. University, 1862, died at Saratoga Springs, March 17, aged 75. He was surgeon and acting medical director of the Army of the Cumberland during the Civil War. In 1864 he established a sanatorium bearing his name and continued in this work throughout his life.

Dr. Frederic Clift, Keokuk, 1891, died at Kaysville, Utah, March 28, of pneumonia, aged 65. He was Secretary of the Davis Co. Medical Association and Editor of the *Utah Medical Journal*, the last number of which noted the absence of certain editorial and other matter due to his sickness.

Orville Horwitz, M. D., Jefferson Medical College, Philadelphia, 1883; emeritus professor of genito-urinary surgery in his alma mater; formerly surgeon to Jefferson Medical College

Hospital, St. Agnes Hospital, the State Hospital for the Insane and Philadelphia General Hospital; consulting surgeon to the Jewish Hospital, formerly a member of the American Medical Association; a member of the Philadelphia College of Physicians, American Surgical Association, American Association of Genito-Urinary Surgeons and American Urological Association, died at his home in Philadelphia, January 28, from spinal sclerosis, aged 52.

Dr. Ira Van Gieson of New York died Mar. 24 from interstitial nephritis, after an illness of several weeks at the age of 47 years. He was born in New York and received his medical degree from the College of Physicians and Surgeons in 1885. He was for a time instructor at the College and later was director of the Pathological Institute. He was well known as a pathologist, and at the time of his death was connected with the research laboratory of the Board of Health. He was the son of Dr. Ransford E. Van Gieson of Brooklyn, who survives him.

Algernon Thomas Bristow, M. D., College of Physicians and Surgeons, New York City, 1876; a member of the American Medical Association; American Academy of Medicine, and American Surgical Association; once vice-president of the New York Academy of Medicine; editor of the *New York State Journal of Medicine*; clinical professor of surgery in the Long Island College Hospital, Brooklyn; consulting surgeon of St. John's Long Island College, Long Island State, Swedish Coney Island and Bushwick Hospitals; representative of the Medical Society of the State of New York in the House of Delegates of the American Medical Association continuously since 1906 except at the 1908 annual session; chairman of the committee of the American Medical Association to inquire of the British Medical Association whether or not a joint meeting of these two organizations is desirable and possible; a prolific writer, and always an active worker for the betterment of the profession and higher ideals in medicine and surgery, died at his home in Brooklyn, March 26, aged 61, from septicemia, the result of a prick of the finger while operating two weeks before. (*Jour. of the A. M. A.*) We take this opportunity to remind our readers that the great majority of medical editors, especially in America, are engaged in active practice and are subject to the same risks and demands upon their time as other practitioners. While this fact sometimes results in minor imperfections in the preparations of journals, it has the great advantage that the editorial point of view of matters of public interest is much more

apt to represent the genuine needs of the profession and the editorial judgment in the selection of technical articles is much more practical and sound, than if the editors were merely office men.

Dr. Mary Elizabeth McCartney, nee Edsall, formerly of Rochester, died April 11, at Avon Park, Fla.

Dr. Zira Hazard Potter, Geneva, 1857, formerly on the faculty of Cornell University, died April 1, aged 76, at Bethlehem, Pa.

BOOK REVIEWS

NEW TOWNS AND BUSINESS OPPORTUNITIES. Booklet sent free upon request by the Chicago, Milwaukee & St. Paul Ry., Chicago.

In its sixty-four pages are listed the population, resources and general characteristics of 250 towns and small cities of recent origin where the growth in population has exceeded the development of the needed businesses and professions.

The first list contained in the booklet is that of the businesses and professional openings which the towns offer. The businesses and professions are listed alphabetically, and each is followed by the names of the towns and cities which now need such a business or professional service as is named.

Then follow two lists of names of towns, each giving briefly such information as men and women need in determining the desirability of the community for their occupations. One of these lists is made up of towns and small cities along the eastern lines of the railroad, the other being made up of communities along the Puget Sound lines. The booklet also contains a comprehensive map showing the location of the towns and the railroad connections.

GOLDEN RULES OF GYNECOLOGY. By George B. Norberg, M. D., Professor of Diseases of Women and Clinical Gynecology, University Medical College, Kansas City, Mo., Gynecologist to Kansas City General Hospital, Fellow and ex-President Kansas City Academy of Medicine; 250 pages; 8 vo.; price, \$2.25. C. V. Mosby Co., St. Louis.

There is a need for just such a book as this one. It does not displace the textbook or the monograph on gynecology, but is rather a guide to what one should know and observe on this fascinating branch of medicine.

In 250 pages one finds the really "Golden Rules"—the observance and application of which will enable the practitioner of medicine to get results. Convenient in size and convincingly

written, this volume can be perused over and over again with the feeling that each time it is read one becomes better able to cope with diseases of women.

TUBERCULIN IN DIAGNOSIS AND TREATMENT, by Francis Marion Pottenger, A. M., M. D., LL. D., Medical Director of the Pottenger Sanatorium for Diseases of the Lungs and Throat, Monrovia, California. The C. V. Mosby Company, Medical Publishers, 801-806 Metropolitan Bldg., St. Louis. 243 pages, royal octavo, 35 illustrations, including one colored plate. Price, \$3.00.

This volume is the most complete and up-to-date work on tuberculin that has yet appeared. Beginning with the importance of tuberculin tests in the early diagnosis of tuberculosis, the author discusses in detail "Subcutaneous Tuberculin Test," "Cutaneous Tuberculin Test," "Tuberculin in Treatment of Tuberculosis," "Hypersensitiveness," "Certain Conditions which have made the Adoption of Tuberculosin as a Diagnostic and Therapeutic Measure Difficult," "Evidences of the Therapeutic Value of Tuberculin," "Fever in the Relationship to Tuberculosis," "Temperature Curve in Tuberculosis," "Technic of Administering Tuberculin," and an Appendix, in which is given for the first time in English, Koch's announcement of the discovery of tuberculin.

Dr. Pottenger is qualified to speak on this subject. Two thousand cases of tuberculosis coming under his personal care in sanatorium practice furnishes the basis for this work. Careful painstaking effort, is everywhere noticeable in this production. The chapters on Importance of the Tuberculin Test in the Early Diagnosis of Tuberculosis is especially to be commended, as well as that on Technique on Administering Tuberculin.

There is no doubt but that many failures attending the use of tuberculin in the past have been due to a lack of knowledge of its proper administration. This defect can be overcome by a careful perusal of this volume and by following its technique.

KEENE'S SURGERY, VOLUME VI, by 81 eminent surgeons, edited by W. W. Keen, M. D., LL. D., Hon. F. R. C. S. (Eng. and Edin.), Emeritus Professor of the Principles of Surgery and of Clinical Surgery, Jefferson Medical College, Phila. Octavo of 1177 pages, with 519 illustrations, 22 in colors. Philadelphia and London: W. B. Saunders Company, 1913. Entire work, consisting of six volumes, per volume, cloth, \$7.00 net; half morocco, \$8.00 net.

The original five volume work by this distinguished author and his collaborators was issued between 1906 and 1909. The present is, therefore, in the nature of a supplement, incorporating recent advances in surgical pathology and clinical surgery. While it includes a general index to all six volumes, the present volume

is really an independent work, consisting of a series of elaborate monographs on modern surgery, using the word modern in its most limited sense; so that it is a valuable addition to the surgeon's library whether he has the original series or not. We are pleased to note that the first article, on Inflammation, is contributed by our Associate Editor, Dr. J. George Adami.

DISEASE IN MILK: THE REMEDY PASTEURIZATION. Compiled by Mrs. Lina Guthers Straus; 221 pages; illustrated.

This book is the record and the lesson of one of the greatest philanthropies ever undertaken. It contains copies of various circulars for instructing the poor and ignorant and statistics of the utmost value for social workers along similar lines. Interesting personal notes of Mr. Nathan Straus's work are appended. We do not quite agree with the implication in the title that Pasteurization is the sole remedy for milk-borne disease, in all places and under all circumstances though it certainly is the most practical at present, for large cities depending on a mixed milk supply. From 1891 to 1911, the annual death rate for children under five, in New York City, declined from 96.5 per 1000 to 41.8. The corresponding death rates for the hot season, June-August, declined from 126.4 to 44.6. Not only has Mr. Straus's philanthropy had a direct effect in improving conditions among the most vulnerable class, but it has had an even greater and far-reaching influence by example and by solving problems for similar institutions and for the country at large. In this work he has been ably seconded by his devoted wife.

With some hesitation, we take this occasion to call attention to an injustice—one of many—done to Mr. Straus's race. A book the size of this report could be compiled, consisting of stories reiterating the stinginess of the Jew. As a matter of fact, the Jew asks the least charity and is the most generous contributor to charity of any race represented in this great boarding house of the world.

TEXT BOOK OF PHYSIOLOGY. Isaac Ott, A. M., M. D., Philadelphia. F. A. Davis Co., Philadelphia; 4th edition; 911 pages; 434 illustrations, many half tones and in color.

Following the usual order of text books on physiology, the author has incorporated much of the newer science, developed from clinical studies of the ductless glands, metabolism, special sense organs and the nervous system. Unfortunately, the allusions to the physiology of articulate speech show a complete lack of conception. Otherwise, the work is excellent.

ABSTRACTS.

ABNORMAL DEVELOPMENT OF TWO-YEAR-OLD CHILD. John Lovett Morse, Boston, *Arch. of Paediatrics*, March, 1913. (Cut kindly loaned by journal.) There was no excess of hair on the face. The penis was very large, measuring $7\frac{1}{2}$ cm. in length when flaccid and 10cm. when erect. The testicles were the size of robin's eggs. He showed no evidence of sexual feel-



Fig. 1.—John P., 23 months old.

ing and repeated examinations of the centrifugalized urinary sediment failed to show spermatozoa.

Measurements.	John P.	Normal at 2 years.	Normal at 4 years.
Body length, crown to sole.....	98 cm.	82.8 cm.	96.7 cm.
Circumference of head.....	52 cm.	48.2 cm.	50.3 cm.
Circumference of chest.....	54 cm.	48.4 cm.	52.8 cm.
Weight	35 lbs.	26.5 lbs.	35 lbs.

Five other male cases are collected from the literature, in one of which there was pressure atrophy of the pituitary. The adrenals were normal in two, contained nodular tumors and showed superactive cortex and medulla in one. All showed pineal gland tumor, whose characteristic symptoms are stated by Glynn to be those of brain tumor in general plus precocious sexual development.

A CASE OF CHOLECYSTITIS due to infection of the gall bladder by the typhoid bacillus in a child three years old. Case report



Fig. 3.—Congenital constriction of descending colon and sigmoid found in case of primary typhoid infection of gall bladder. Child, 3 years.

by H. Lowenburg, A. M., M. D., Philadelphia, *Arch. of Paed.*, March, 1913. (Cut kindly loaned by Journal).

ILLGITIMACY IN FRANCE. 11 per cent. of children born in France are illegitimate—75,000 a year. 20 per cent. are born in Paris, which has about 7 per cent of the population. 600 infanticides and 150 abandonments occur in a year. The mortality of illegitimate children is about double that of legitimate. In plain language, sexual immorality involves manslaughter. Not France alone, but a large transient foreign population must bear this moral responsibility. A law has passed its first reading, making the father of an illegitimate child responsible for its maintenance, but how the parenthood is to be established is a difficult problem. *Medical Press and Circular*.

SPONTANEOUS GASTRO-ENTEROSTOMY DIAGNOSED BY X-RAYS. Douarre of Toulon, *Arch. d'Elect. Med.*, March 10, 1913, mentions the case of a physician aged 73 whose troubles began four years ago, with slight digestive disturbances and occasional cramps which he ascribed to a taenia with which he was infested. The pains became more severe and were accompanied or followed by vomiting. Constipation was present. In May, 1912, he had a terrible nocturnal attack of pain lasting four or five hours. Since this the symptoms were relieved. Physical examination revealed nothing but gastric borborygmi on succussion, slight sensitiveness at the umbilic level, soft abdominal wall without induration or tumor, scybalae in the ascending and descending colon. Immediately after the ingestion of bismuth emulsion the gastric shadow was normal, but, in ten minutes, the mass had passed below the stomach, a streak apparently indicating that it had gone through an opening. The question between gastro-nesteostomy and gastro colostomy, was decided by subsequent views, 6-48 hours after ingestion, showing the gradual, delayed outlining of the colon typically. The lack of marasmus and the persistence of constipation with rather hard faeces also corroborated the opinion that the fistula was between the stomach and the jejunum. Some bismuth remained in the stomach for 24 hours. Reference is made to a similar case of Menuet in the November, 1911, issue of the same journal. (NOTE: While the observation is interesting and the explanation plausible, there was no section and we rather favor scepticism in extremely rare cases. For example, in a personal case, both auscultatory percussion and X-rays indicated an Hour-glass stomach. Necropsy showed that there was pyloric cancer (the malignant nature of the case had already been diagnosed) and a somewhat dilated duodenum. In any unique case, it is well to assume the attitude of the man who stood before the cage of a rhinoceras for half an hour and then turned away with the remark: "Gosh, there ain't no such critter.")

CONGENITAL ATRESIA OF THE ESOPHAGUS. *Archiv für Kinderheilkunde*. W. P. Shukowsky and A. H. Bacon report the case of an infant that manifested a slight degree of asphyxia at birth and that was not able to perform the act of sucking. There was a persistent discharge from the nose, of a tenacious grayish white secretion. Death occurred in forty-eight hours. At autopsy there was found a dilatation of the esophagus that terminated below in a blind pouch. This communicated by means of a slitlike fistula with the trachea.

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ORIGINAL ARTICLES

No responsibility is assumed by the Journal for the opinions of contributors of original articles; nor for methods of expression nor errors in proof reading, excepting for articles in a foreign language contributed for translation. The right is reserved to decline contributions on account of bona fide lack of space; or because they do not bear on practical medicine and surgery; or because they would fail to interest or would give offense to the majority of subscribers. The expression of minority views or reasonable and courteous criticism of the views of others is not considered offensive.

Examinations of the Digestive Organs—Chronic Disease Generally

BY BOARDMAN REED, M.D.
Los Angeles, Calif

THE progress of medical science has been so rapid in these last years that large numbers of physicians are not keeping up with even the discoveries and achievements in the more important practical lines. This is unavoidably true of even the more broadly educated men in the regular profession, especially of those who are kept excessively busy early and late with very little time left for study. As for those who have got into practice through any of the side doors after an insufficient course, such as many of the sectarian schools provide, their shortcomings are necessarily great.

In the chronic stomach cases the patients have usually seen various physicians or healers of some sort before consulting a gastrologist, and yet it is rare to meet with a chronic dyspeptic who has been thoroughly examined, even externally, with sufficient care to determine the size and position of the liver, stomach and colon, in addition to the more usual examination of the urine, heart and lungs, yet such an examination is easily made in most cases by a well trained diagnostician with sufficient accuracy to be reasonably decisive, even without the help of the X-ray. The chemical analysis of the stomach contents and stool and microscopical examination of these can sometimes be deferred till later in the less severe cases, since they are not usually practicable, except with the help of a specialist, as is also true of the equally important tests of the motility. But how foolish it manifestly is to put a dyspeptic patient upon a course of any active

drugs without at least making the simple external examination which would determine whether or not there is some marked displacement or dilatation of one of the viscera which would absolutely prevent any cure till it had been attended to; and one of the ablest internists has declared that fifty per cent. of all civilized women have enteroptosis.

After getting a full history and account of the patient's symptoms in a stomach case, the first step should be to map out the abdominal organs by palpation (the Pottenger light touch palpation especially) and percussion with a confirmation of the findings in very doubtful cases by means of the X-ray; and in most cases, especially when the complaints include pains in any part of the alimentary canal, or vomiting, constipation or diarrhea, unless they should yield within a few days or weeks at the furthest, there should be a chemical and microscopical examination of the gastric contents and of a stool after specially prescribed meals. These examinations are very necessary to that complete knowledge of the case which should precede any prolonged treatment that might otherwise be on the wrong track and thus do more harm than good. The lack of such thoroughness in reaching a diagnosis accounts for many failures in treatment.

The derangement of the stomach that is one of the most easily cured in an early stage is a simple excess of the hydrochloric acid in the gastric juice—hyperchlorhydria—which is a frequently noted result of too much of the universally used condiments and other stimulating accessories of our food, and, indeed, of merely eating regularly three or four times a day too much food of any kind—and still more of a large excess irregularly, that is at irregular times. And this is the form of indigestion which leading gastrologists now assert to be most commonly found in their patients. It is usually remedied easily at first by regulating the diet and habits of the patient otherwise without even having to prescribe full doses of some mild alkaline drug, which is necessary in advanced cases. When, in such cases, there is a failure to make the diagnosis early, or still worse, when the common mistake is made of diagnosing them vaguely as "stomach trouble" and prescribing hydrochloric acid with or without pepsin, a frequent result after a long continuance of the wrong treatment, is a marked aggravation of the pain and finally either gastric or duodenal ulcer in the site of which cancer not infrequently develops.

This is a trite theme for up-to-date clinicians, but that it needs more discussion for the majority of physicians is only

too manifest. The *Journal of the American Medical Association* of March 8th contains a valuable and really important paper which shows nevertheless how even some of our most prominent men fail to appreciate the great usefulness of gastric analysis in settling a doubtful case and enabling the attendant to cure promptly at first a simple functional affection which, neglected for a few months through ignorance of the exact secretory conditions, is likely to become finally a fatal disease. The writer of the paper is one of the distinguished surgeons of this country, Dr. Wm. H. Wathen of Louisville, Ky. He cites several obscure points which have been cleared up by the work of the surgeons through their operations in the abdominal cavity. He says:

"We were told that chronic ulcer in the stomach was usually multiple and ten times more frequent than chronic ulcer in the duodenum. We now know that chronic ulcer in the stomach is multiple in about six per cent. of cases and that we have one ulcer in the stomach to three in the duodenum." These are certainly most important facts which the surgeons have established. He shows also that ulcers of the stomach are more frequent in men than in women, contrary to the prevalent idea, a proportion in fact, of 75 per cent. in men; but he errs in intimating that the same false notion has prevailed until now as to duodenal ulcer. The recent books on diseases of the stomach and intestines—my own certainly and most of the other later works on the subject with which I am familiar, state that duodenal ulcer is more frequent in men. Wathens has evidently been a more careful student of the results of operation on the abdomen than most surgeons, for he admits frankly, in opposition to them, what the internists have always insisted upon, that only a small proportion of gastrointestinal cases need to be turned over to the surgeons. In the same paper he says:

"In 90 per cent. of cases of chronic dyspepsia there is no pathologic lesion in the stomach, and the conditions requiring operation in the entire gastrointestinal tract, and all structures in the abdominal and pelvic cavities, do not exceed 30 per cent." But the statements in Dr. Wathen's paper that will tend to mislead some readers and confirm the indifferent ones in their careless custom of delaying too long in having gastric analysis made are the following:

"The effort to construct a pathology on chemical analysis of the stomach secretions has been a total failure," and again, "while I do not deny that there is value in stomach analysis, it must always be subordinate to the clinical history and the physical examination." Since the surgeons have so clearly demon-

strated to us by their operations that in a large proportion of cases gastric cancer forms in the site of an ulcer which, in the beginning at least, is always associated with an excessive secretion of hydrochloric acid, the importance of making a chemical analysis soon after there is a suspicion of an excessive secretion, should surely not be minimized, no matter what expense of time, trouble and money it may involve. And let it be repeated that of all the manifold gastrointestinal troubles, functional and organic, hyperchlorhydria, even though it be a symptom only, is the most prevalent according to a number of the authorities.

While this article is being written, there comes to hand the "*Archiv fuer Verdauungskrankheiten*" of February, 1913, containing a very elaborate paper entitled "A Contribution to the Clinical Diagnosis Between Ulcer of the Stomach and Ulcer of the Duodenum," by Dr. Sommerfeld of Posen, the opening sentence of which is as follows: "Through the works of English and American surgeons especially it has been shown in the last years that ulcer of the duodenum is more frequent than we have hitherto supposed." The writer of the paper cites several Continental authors who have questioned the propriety of following Mayo in accepting as the correct boundary line between ulcers of the stomach and duodenum the vein which crosses the pylorus, because of the variability of its course. Sommerfeld divides into three groups the 44 ulcer cases which he has studied carefully in the German Alexander Hospital in St. Petersburg and determined the localization of them by either operation or section. In 11 of these the ulcer was above the pylorus, 10 of them in the lesser and one in the greater curvature. In 12 the ulcer was within the pylorus, and in 21 it was in the duodenum and mostly within a few centimeters of the pylorus.

In constipation the physician, before advising a dependence upon purgatives or enemata, which is about the worst he could do, should first be able to exclude such surgical affections as tumors and adhesions as well as dilatation or displacement in any part of the digestive tube, and also hyperchlorhydria, which, besides its other serious tendencies, markedly conduces to constipation. Dr. Benedict's effervescent test of the stomach contents will often suffice in such a case, without the need of introducing the stomach tube, though a thorough examination of the stomach contents furnishes much more information. In the constipation of babies and in all very stubborn cases pyloric stenosis should be looked for, and in women one should think of a possible retroversion or flexion.

Not only in the manifest disorders of the digestive tract but also in that extremely common group of circulatory diseases,

hypertension, arteriosclerosis and Bright's, which so frequently develop insidiously in chronic indigestion, the same thorough examinations of the abdominal viscera followed by a careful regulation of the diet are necessary, if we would succeed in even staying their progress and prolonging life. Excessive indulgence at the table and all kinds of imprudence in eating and drinking, though not necessarily of alcoholic liquors, will generally be found to be prominent among the causes; and to tell the patient that he has been eating too much as well as often too richly, and insist upon a change in his perverted habits in these respects, requires exceptional courage and force in the attendant.

Besides great attention to the diet, which is of chief importance in these affections, various mechanical methods, hydriatic, electric, etc., including also vibration, massage and a sufficient amount of exercise in some form, active or passive according to the nature and stage of the malady, are very valuable adjuvants. Drugs play only a subordinate role here, except that when the heart has begun to fail some cardiac tonic becomes indispensable, and digitalin, Merck's Germanic, has proved in most cases the most satisfactory one.

The proper treatment of virtually all the chronic diseases is likely to require that the family physician, when he retains charge of the patient, should hold consultations with specialists, and often in more than one line, as well as make or have made numerous tedious laboratory examinations. And one who is no longer seeking practice may be permitted to say that not all of our general practitioners are obtaining as much assistance from consultants as their well-to-do patients would be only too glad to pay for in serious cases, or in cases which are entering upon a downward course which tends to end seriously unless they are soon put upon the right track. It is only after extraordinary effort and care, entailing often a very heavy expense, have been employed unavailingly, that scientific medicine can in any case be said to have failed.

ANGULATION OF THE JUNCTION OF THE HEPATIC AND COMMON DUCTS AFTER CHOLECYSTOMY. SIMULATING COMMON DUCT OBSTRUCTION. DeWitt Stetten, M. D. *Annals of Surgery*, Feb., 1913.—The author reports a case in New York in which the tension necessary to bring the gall bladder up to the peritoneum for attachment was the cause of the angulation, and intimates that this fault is responsible for failure of a biliary fistula to close where overlooked gallstones or similar obstructions can be ruled out. He recommends more frequent excision of the gall bladder or at least no fixation of the gall bladder which results in tension upward.

Description of a Simple Portable Apparatus for the Application of Plaster Jackets in Hyperextension.

BY PRESCOTT LE BRETON

Buffalo

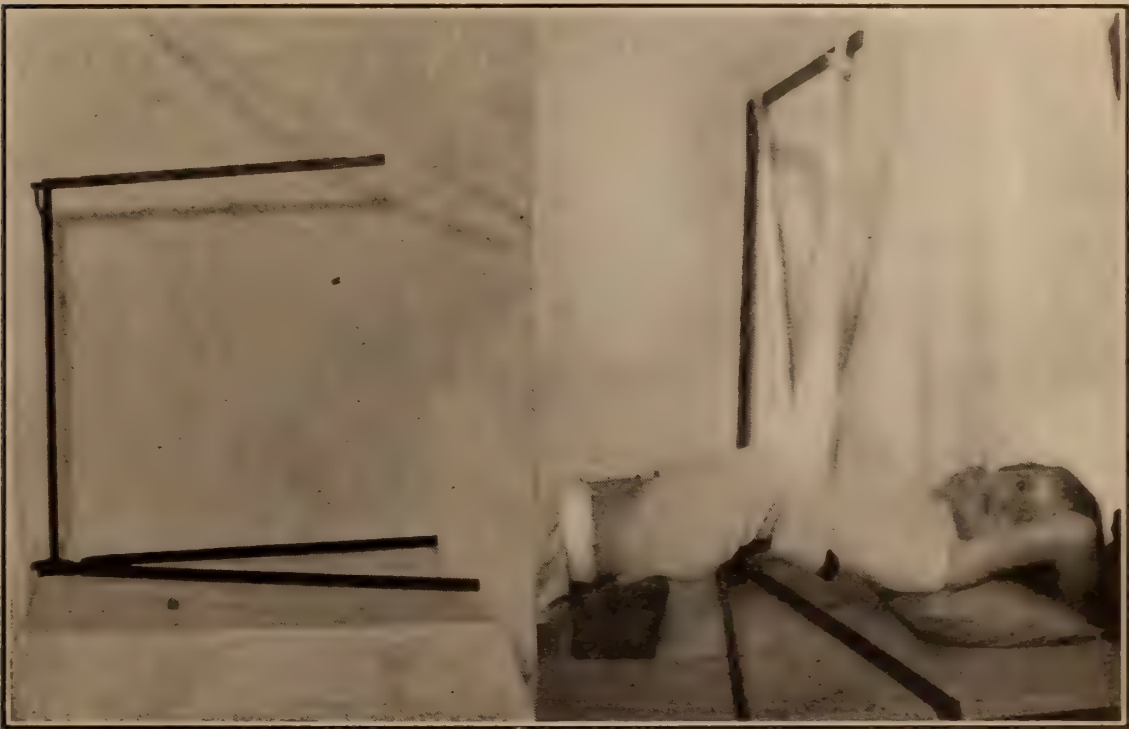
MANY forms of apparatus have been described, the object of which was to allow the application of a jacket in the prone position, at the same time providing for a greater or less amount of hyperextension of the spine. The model, as shown in the illustrations, was devised by the writer, especially for cases of



Pott's disease in children, although it is useful in varied conditions. The principle is not new, but the mechanism differs, and its chief advantage is that it can be taken apart and put together in a few seconds and can be easily carried in one hand like an umbrella. The illustrations show it is effective in providing a jacket which gives fixation and hyperextension.

The lower part consists of two pieces of angle iron, each two feet long, bent at one end on the flat and fastened to a two-inch circular base of iron. One bar is screwed tight, the other loose, so that they may be separated any desired amount, to provide a firm base for the entire apparatus. The upright bar of iron

is solid, five-eighths inch diameter and two feet long, and the lower end screws readily into a hole in the centre of the circular base. The upper end of the upright has an open slot for the crosspiece, and an offshoot with an enclosed slot for the reception of the end of the crosspiece. The crosspiece is a two-foot angle iron, one end of which rests in the open slot, extending beyond to be caught at the extreme end in the enclosed slot. The slots are wide, to allow one to place this upper bar readily in position. The illustrations show two indentations which prevent the ends of the bandage from slipping. When disconnected, the three parts, being straight and of the same length, are easily carried by hand.



The patient puts on a stockinette shirt as usual, and lies down as in the photograph, buttocks and shoulders resting on supports of some kind, to raise the back from the table. The apparatus is placed crosswise, the upper bar over the kyphos. A thick felt pad is held against the kyphos, and a broad muslin bandage placed against the felt, the ends coming up to the upper bar. The ends are tied with enough tension to bow the back to the desired degree. Sheet wadding, felt and plaster bandages are used as in any case. Later the bandage is cut where it emerges and the holes covered by a layer of plaster bandage.

It is evident that close application of the jacket is possible at the three essential points, *i. e.*, the kyphos posteriorly and the sternum and anterior spinous processes anteriorly. For high Pott's, where a jacket is continued above the shoulders or for

acute disease in the cervical region, attended by pain, spasm, or abscess formation, the same apparatus may be used, modifying its position and possibly using two bandages for support, the edges of which could be stitched to the stockinette to hold them in the desired position. With an assistant at the head and another at the feet, traction may be provided as the jacket is applied. The upright position by Sayre's suspension is often inconvenient, owing to the age of the patient or his condition, hence the advantage of an appliance providing for the application of jackets in the prone position, preferably on the back and not on the face.

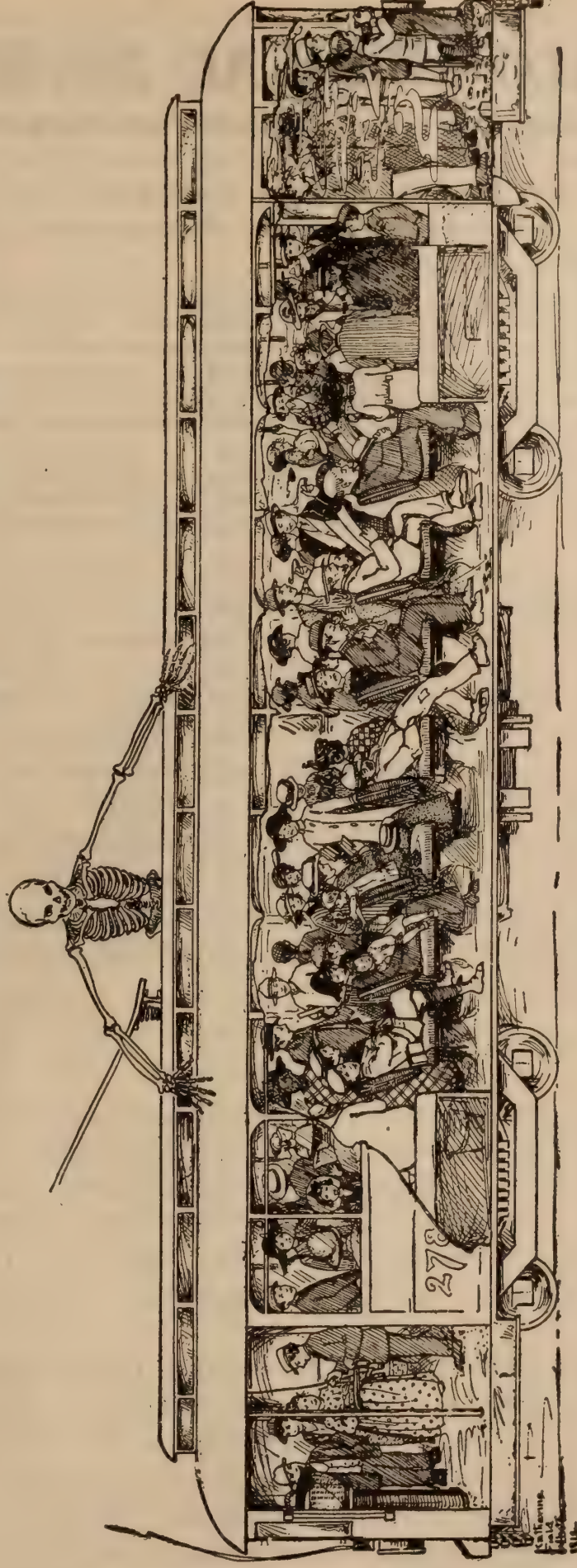
GENERAL PARALYSIS IN DOGS. L. Marchand and G. Petit, *Arch. Internat. de Neurol.*, November, 1912, recognize clinically, a commoner dementia type and an epileptic. Pathologically, there is diffuse, sub-acute meningitis and encephalitis, and often there is a cerebellar, bulbar or cord lesion. The symptoms are described quite in human terms, as loss of memory, filthy habits, boulimia, etc. These observations are held to indicate the importance of vaguely understood, non-syphilitic causes in producing general paralysis. However, in the light of recent discoveries, syphilis cannot be regarded as an exclusively human disease, and further research is necessary to show how its manifestations, as well as those of other diseases, are modified by a difference of genus in the hosts.

HYPERTHYROIDISM PRECIPITATED BY IODINE. Jervell, *Forhand. i det. Med. Selskab*, 1912, page 256. Gastro-enterostomy was done for obstructive gastric cancer, the skin being disinfected with iodine. The patient was a woman aged 64, with a small elastic left-sided goitre which had never given symptoms. On the third day the pulse gradually rose to 180 and reached 200 on the fourth. Other but not all signs of Graves's disease were present. Death occurred on the nineteenth day, although digalen had temporarily brought the pulse down. The heart was slightly dilated, flaccid, and there was a small embolus in the right pulmonary artery. Iodine was absent in the urine from the 7th to the 10th day, present from the 11th to the 15th.

CRETINISM RELIEVED BY THYROID EXTRACT. F. Lee Stone of Beaver Crossing, Neb., reports the case of a child eight months old, born of German parents. *Western Med. Rev.*, April, 1913.

EN ROUTE - TO ILL HEALTH

THE UNVENTILATED, OVERCROWDED STREET CAR IS A POSITIVE MENACE TO HEALTH



A box full of steaming, sneezing, spitting, sputtering, coughing human beings, each breathing in the other's foul exhalations. . . . Such is the ordinary city street car during "rush hours."

Many a morning's ambition, born of the freshness of the waking hour, has been stifled by the foulness of the morning's ride.

BUFFALO MEDICAL JOURNAL

A Monthly Review of Medicine and Surgery

EDITOR AND PUBLISHER DR. A. L. BENEDICT, 228 Summer St.,
corner of Elmwood Ave., Buffalo. (Address for all communications. Please make
personal and telephone calls before 1 P. M.)

THE BUFFALO MEDICAL JOURNAL is the third, in age, in the western continent. It is independent but supports professional organization. As a scientific medium it is unrestricted in territory. As a news medium, it is limited mainly to the western four districts of the Medical Society of the State of New York. The co-operation of physicians is asked in securing personal, obituary and other news items. Secretaries of Medical Societies in this region are requested to send brief reports of meetings. Full transactions will be published at cost of composition.

Subscription \$2.00 a year in advance; \$3.00 for two years in advance. Changes and errors in address or failure or duplication of delivery, should be reported immediately. Back numbers will be supplied if possible but requests for copies should be made promptly.

YEARLY VOLUME 68.

JUNE, 1913

No. 11

The cat, not highly esteemed for intelligence or altruism, digs a hole and covers it up. The dog, more intelligent and more influenced by man, has reduced his hereditary instinct to three inefficient kicks at the dirt. Man, till a hundred years ago, left it for his neighbor to step in; with greater enlightenment, he conveniently dropped it into his neighbor's water supply. Recently, very reluctantly and only in response to scientific demonstration regarding typhoid and cholera, he is beginning to manifest the instinctive decency of the cat.

Keep Cool.

The heat regulating function of the human body, in a natural state, is said to be competent to keep the individual fairly comfortable and free from danger from either hyperthermia or chilling, without clothing, for a range of 10 degrees centigrade either way from the normal, *i. e.*, from about 81 to 117 Fahrenheit. For this region the ordinary summer variation is from about 60 to 95.

With the customary clothing, the average person suffers from heat during much of the summer. His efficiency is lessened, he is tempted to the too free use of beverages more or less harmful in themselves, beside the possible danger of heat stroke, it is altogether likely that the continued discomfort and the disturbance of circulatory equilibrium and that normally attending the passage of water into and out of the body, may result in various vis-

ceral lesions. With due respect for the pneumococcus, the somewhat putative rheumatococcus and other germs, the almost inevitable diurnal lowering of temperature acting on a relaxed and moistened skin, is liable to result in various inflammatory disorders including one phase of the many sided symptom-complex still commonly called rheumatism.

The moral is, to dress as coolly as possible for the day and to carry extra wraps for the evening. Personally, we disagree entirely with those who advocate wearing flannels till the first day of May. Indeed, we think woolen underwear should be limited to elderly, sedentary, dry-skinned persons, and that cotton or other more hygroscopic garments should be worn, even in winter, by ordinary persons. It is a good rule to dress according to the thermometer and not the calendar.

As to the complicated problems of women's dress, we have nothing to say further than to express the hope that fashions may be modified so as to allow a more even distribution of heat-retaining devices. Still, there is something to be said in favor of the method of carefully preserving the body heat over the viscera and leaving the extremities in a state of nakedness or what approaches it.

As to men's wear, we offer the following suggestions: Wear low shoes and a straw hat or some other light head covering and keep it off whenever possible. Have the drawers loose, practically washable trouser-linings, coming far enough below the knees to prevent contact with the trousers. Suspend with a tape a handkerchief over the chest in lieu of an undershirt. Wear an outing shirt with a soft collar if you have the moral courage. Have the coat and trousers as light as possible and wear no vest (we beg pardon, waistcoat). Keep your coat off and your shirt-sleeves rolled up as much as convention allows. Even a fat man can wear a belt and dispense with suspenders, if his tailor knows enough to cut the trousers so as to engage at the iliac crest. Most of the energy wasted in keeping the trousers up is due to their being cut in the empire fashion. On hot days don't loll in a hammock with a fan and a pitcher of ice water, but get out and sweat. On excessively hot days, when there is no pleasure in this, stay indoors as much as you can in your birthday suit, visit the bath tub occasionally, and you will be surprised how much desk work you can accomplish.

The Tax on Time by Medical Societies. .

Having within a week resigned membership in one national organization and declined membership in another, it occurred to

us to see whether the excuse of lack of time was valid. Here are the actual figures:

Local Academy.....	33 evenings
County Society.....	4 evenings
Special lectures.....	3 evenings or parts of afternoons
District Branch.....	1 day
State Society.....	3 days
Central N. Y. Assn.....	1 day
Alumni Assn.....	2 days
A. M. A. and coincident societies	7 days

Totals 40 evenings 14 days

Estimating the evening and afternoon meetings as equivalent to 12 days, the total amounts to 26 days a year. No allowance is made for attendance at other meetings as guest, committee work, special meetings, etc. Several of the organizations mentioned above have, at times, held an additional session. The final sessions of the state and national organizations are not counted, nor is time in traveling. No account is taken of non-medical scientific societies, and the various special scientific medical societies, sociologic organizations and the like, with which so many physicians are connected. While practically all of the organizations mentioned involve business and recreation, the time is estimated on the basis of working days devoted to technical study. In this respect, medical conventions bear little resemblance to ordinary professional and business conventions.

With allowance for Sundays, therefore, the physician who attends regularly meetings of only those organizations which may be considered a duty and not a choice, spends the equivalent of a month of diligent college work—a month without half or whole holidays and, therefore, equivalent to more than an eighth of a college year.

The Imposing Front.

A few days ago we passed a building in process of construction and admired the massive stone walls of the lower story, suggesting security and stability for the whole superstructure. And then, as we looked upward, in spite of being reasonably well informed in modern methods, we experienced a shock of surprise to see a gap of a couple of stories, merely outlined in narrow lines of metal, and above it two or three stories of completed walls. Aside from the appearance, the solid stone walls might just as well have been glass windows and tin sheets. They had nothing

to do with the strength of the building, which depended on the unobtrusive, seemingly frail beams of steel which would be hidden when the building was completed.

From having recently read, in the *Atlantic*, a praise for the old school reader, we were, perhaps, in a moralizing and philosophic mood, which we usually try to avoid. Anyway, we thought how well this building typified the medical profession—and others—with imposing, substantial men on the ground floor, putting up a good front to the passerby and apparently bearing the whole weight of the wisdom of the profession, whereas the real strength is due to the laboratory and other students, mostly concealed from public view, receiving little of the praise of the public for the stability of the whole structure. And in summer, with the hot air due to the reflection of the sun upon those massive stones on the ground floor adding oppressively to the impressiveness of the structure, the metaphor would be still more complete. Yet, in justice to those who usurp the gaze of the admiring throng, it is only fair to concede that, in times past, they really did carry weight and supported the professional pile, as did the literal stones.

A Warning to White Slave Workers.

We have every sympathy for the great effort being put forth to elevate moral standards and to alleviate the sufferings of victims of their own folly or precocious viciousness, but we think that purity workers generally will be the subjects of imposition if they are not hard-headed as well as soft-hearted. In a sense, nearly every human being is a slave. He or she gets started in a line of activity and, as time passes, it becomes harder and harder to change, while, in most instances, the daily demands are just about even with the daily means of supplying them. The lower socially, the more questionable morally the line of life work, the more nearly does it resemble a literal slavery. Yet, on reflection, it is plain that any successful opposition to pandering must be based on a very literal interpretation of white slavery and that any tendency to confusion with the moral, social and economic problems of prostitution in general will lead to difficulties. Among these difficulties may be mentioned the tendency to hysteria, fabrication and blackmail.

We feel that someone ought to make these remarks. Personally, we are skeptic as to the extent of white slavery, on the general economic ground of supply and demand. Why should anyone adopt the risky, expensive and elaborate methods of the white slaver when there is already a liberal supply of prostitutes and

when men frequently boast that they never go near a house of prostitution, not as a matter of morality, but "because they can get all they want outside"? If it were conspicuous that white slavery represented an attempt to get immature girls or victims for perverts, we should take more stock in it. In a recent discussion of the subject one of our prominent physicians stated in rebuttal of the statement that every city had its white slave traffic, that he had formerly been employed by the health department in a capacity that led to his investigating most of the houses of prostitution of the city and that he had never seen a barred window nor come across other evidence of involuntary confinement.

Here is a true story, vouched for by a man from Chicago, of good standing and in close touch with the purity work of that city, that seems to indicate a need of the hard-headedness previously mentioned. A party of social workers went to a convention in another city. One of the active purity-workers—and our understanding is that he was actually an employed official in white slave cases—was accompanied by his wife. For the sake of economy they did not go to the hotel headquarters but sought a boarding house. They did not appear at the meeting the next day. After some search they were found in jail. The "boarding house" had been pulled in a police raid. They had told their story, which was absolutely true but so much stranger and more incredible than fiction that, naturally enough, the police had not accepted it. Now imagine a man, presumably grown up, since he had a wife, engaged in practical social work, perhaps having a voice in the conviction of other men for white slaving, so lacking in perspicuity. It reminds us of the story of the man who said to the farmer: "Will you kindly tell me what that very interesting plant is that you are cultivating?" The farmer replied: "By gum, I thought even a city man knew corn when he saw it—what's your business, stranger?" And the stranger replied that he was the editor of *The Practical Farmer*.

Fly Swatting.

As an epigrammatic expression of a general hygienic truth, the injunction to swat the fly has done good work. The public has learned just how dangerous and filthy the fly is—or rather it has received an exaggerated idea of its danger and filthiness for, like many other direct menaces to human health, the fly is dangerous mainly because he reflects man's own filthiness upon him. Perhaps it is well to leave the laity with a slightly exaggerated idea of this danger, as of many others. But it would be well to

progress to the second lesson that "swat the fly" should be taken rather in a figurative than in a literal sense.

Fly swatting is all right as applied to the first ones of the season and to the occasional ones that pass by screens. A dead fly is, on some accounts, less dangerous than a live one, but is still a danger, perhaps more dangerous than the one that escapes from the house. If the fly is swatted and then burned or—with due disregard for the down stream population—dropped down a sewer, it is disposed of. If it is swatted and its carcass left in a corner of the living room it is only less dangerous than when flying about and a good deal more so than if driven out doors.

Fly swatting is also indirectly dangerous by detracting attention from the wholesale methods of screening, catching with papers, poisonous solutions, etc., and by the cardinal fact that it is not the fly itself but the germ-laden matter on which it feeds that is the ultimate source of danger. If there were no flies, open manure boxes would still be somewhat dangerous, and exposed privy vaults, garbage cans, sputum, etc., very dangerous. And, if the feeding places of flies, and especially those liable to special forms of contamination, were done away with, the fly itself would be almost harmless.

The particular danger of the slogan "Swat the fly" is that it is liable to be taken up by children, especially in the vacation season. Children are very impressionable, and they are likely to feel that a fly swatting campaign is a meritorious act and that the more flies they kill the better. Without entering into the question of the ethical influence on the child's psychology, of training it to kill anything, it is only necessary to point out that the child, impressed with the injunction to swat the fly, is going where there are the most flies to swat—in other words, just where the fly danger is particularly great. Children are not marked for aesthetic notions, nor for systematic concentration. Their fly-swatting campaigns about the manure pile, privy or garbage can, will be interrupted occasionally to get a drink of water, or a stick of candy, or for meals, and they will not always wash their hands.

If it were at all conceivable that the puny efforts of the little ones would accomplish as much against the fly as any one of many simple methods of prevention and exclusion, there might be something to be said in favor of entrusting the campaign to them. But, in the long run, teaching children to swat the fly will produce no appreciable hygienic effect except to magnify the dangers of the fly by intensifying the chances of infection among the least resistant members of the community.

Toads and Warts.

We have all heard the old grannies say that warts were due to handling toads, and have laughed at the notion. Quite a long time ago we disproved this statement by personal experiment, but we also proved that *rhus toxicodendron* was harmless—to the same subject of experiment. In the light of recent discoveries showing the presence of an irritant poison—buffonin—in the skin of the toad, and a similar one in the frog, we are rather inclined to place some credence in the toad theory of the production of warts. Caspar and Loewy have reported that the arrow poison of the Indians of Columbia is derived by pricking the skin of a frog. This poisoning paralyzes the animal shot and enables him to be captured even if slightly wounded. Now don't understand us to claim that all warts are due to handling toads, or frogs, nor that every child handling a bactrian develops warts. But papillomas generally are due to irritation, perhaps especially of a chemic nature. Warts are undeniably more common in country dwellers than in city dwellers, they are more common in the summer than in the winter, though often persistent, they are more common in the young and rarely affect adults who are careful as to their hands. We suggest that, this summer, our readers investigate the etiology clinically, with a view to determining how far exposure to various irritants is operative, and with particular attention to the toad theory and to ascertain other potential causes.

Editorial Announcements

The July issue will devote considerable space to the various activities in connexion with the annual commencement and alumni meetings of the University of Buffalo, and we hope also to have similar announcements regarding Syracuse University, the only other graduate medical school in our special territory.

Owing to the unexpected demand for extra copies of the May issue, our reserve file is practically exhausted, and we shall consider it a personal favor if our readers who have no further use for this issue, will send copies to Dr. James MacLeod of Buffalo, who wishes a number on account of the obituary notice of his brother.

A MEMORIAL TO FIELD SURGEONS is proposed for Gettysburg by Dr. S. Weir Mitchell of Philadelphia. Thirteen Union Surgeons were killed or wounded in this battle, and the Confederates left eighty surgeons in charge of their wounded.

TOPICS OF PUBLIC INTEREST.

Opening exercises of the Henry Phipps Psychiatric Clinic, Johns Hopkins Hospital, Baltimore, Maryland.

Prepared by DR. ARTHUR W. HURD, Buffalo.

A notable event in the medical world took place April 16-17-18 last, when in Baltimore there was formally opened the psychiatric clinic given to the Johns Hopkins Hospital for the study and treatment of mental diseases. The program was an interesting one, and was participated in by many distinguished physicians, both from this country and abroad. The chief exercises took place on the 16th, and the speakers were:

Dr. William H. Welch; Dr. Stewart Paton, who was influential in securing this munificent gift from Mr. Henry Phipps; Dr. Henry D. Harlan, of the Board of Trustees; Sir William Osler, Bart, F. R. S. The rest of the program was made of scientific papers, a large part of the program being filled by distinguished scientists from Europe. The following is the program:

APRIL 16, 1913, 3 P. M.

The Henry Phipps Psychiatric Clinic.

Invocation, Rufus M. Jones, D. Litt. Minister, Society of Friends, Haverford College, Pa.; introduction, Dr. William H. Welch; "The Clinic and the Community," Dr. Stewart Paton; "A Word of Appreciation," Henry D. Harlan, President of the Board of Trustees of the Johns Hopkins Hospital; "Specialism in General Hospitals," Sir Wm. Osler, Bart., F. R. S., etc.; inspection of the building; tea.

APRIL 17, 1913, 10 A. M.

The recreation room of the Henry Phipps Psychiatric Clinic.

"The Sources and Direction of Psycho-Physical Energy," Prof. W. McDougall; "Autistic Thinking," Prof. E. Bleuler; "Personality and Psychosis," Prof. A. Hoch; "The Personal Factor in Association Reactions," Dr. L. F. Wells.

4:30 P. M.—Visit to the Sheppard and Enoch Pratt Hospital; tea.

8:30 P. M.—Meeting at Osler Hall, Medical and Chirurgical Faculty building, 1112 Cathedral street.

"A Study of the Neuropathic Inheritance in Relation to Insanity," Dr. F. W. Mott, F. R. S.; "Pellagra," Prof. O. Rossi; "Psychic Derangements Associated with Ductless Gland Disorders," Prof. H. Cushing.

APRIL 18, 1913, 10 A. M.

The recreation room of the Henry Phipps Psychiatric Clinic.

"Primitive Mechanisms of Individual Adjustment," Dr. S. Paton; "Demenz Probleme," Prof. Heilbronner; "The Interrelation of the Biogenetic Psychoses," Dr. E. Jones; "The Prognostic Significance of the Biogenetic Psychoses," Dr. G. H. Kirby.

1 P. M.—Luncheon at the Johns Hopkins Hospital.

2:30 P. M.—The recreation room of the Henry Phipps Psychiatric Clinic.

Address, Dr. Achucarro; "Anatomical Border Line Between the So-called Syphilitic and Metasyphilitic Disorders," Dr. C. B. Dunlap; "Disorders Connected with Anemia," Prof. A. M. Barrett; closing address, Prof. A. Meyer.

A remarkable feature of the entire three-days' program was the intense interest manifested by the general public of Baltimore, which speaks well for the high position which the University holds in the city and state, although it may be fairly well assumed that a part of the enthusiasm which crowded the lecture rooms to the doors, even when the programs were entirely technical, may have been due to the extraordinary respect and appreciation which Baltimore holds for Dr. Osler, who had returned to Baltimore for this occasion, from his home in Oxford, England. The citizens of Baltimore gave a large dinner at the Hotel Belvedere in honor of the occasion, at which there were present about 350 people. Dr. William H. Welch presided and, of course, the guest of honor was Mr. Henry Phipps. As to the aim and status of the Clinic, the following editorial by Dr. Henry M. Hurd, now Secretary and Adviser of the Board of Trustees, and formerly Superintendent of the Hospital, published in the *Baltimore Sun*, may be of interest:

"The opening of this Clinic in connection with the Johns Hopkins Hospital calls attention to a new method of dealing with mental disease in its early stages in Baltimore. Maryland in the past, it is true, has not been lacking in praiseworthy efforts to solve the problems which have arisen in the care of her insane. More than three-quarters of a century ago Dr. Richard Sprigg Stewart, almost single-handed, opened and organized the Maryland Hospital, now known as the Spring Grove Hospital, upon the actual site of the new Clinic. A few years later Dr. W. H. Stokes assisted the Sisters of Charity in the establishment of what is now the Mount Hope institution, and not many years afterward Moses Sheppard made the largest single bequest which had ever been made in the United States to found a similar institution, the present Sheppard and Enoch Pratt Hospital. All of

these institutions for many years past have done excellent work in caring for patients suffering from the various forms of mental disease.

"The new Phipps Clinic is an attempt to apply the methods and conditions under which acute diseases are treated in a general hospital to the care and treatment of insanity. It is hoped that the effect of this will be to secure prompt admission for all patients without legal formalities or vexatious delays, just as pneumonia, typhoid fever or any other acute diseases are received for treatment at any hospital as soon as the necessity of hospital care is apparent. The development of one of these diseases and the need of treatment are all that are requisite to secure immediate admission to a hospital. A similar ease of admission places mental disease upon the same footing as other acute diseases and a resort to a general hospital for treatment will no longer bring a stigma as to an asylum. Fortunately the liberal Maryland law providing for the voluntary admission of mental patients will render it practicable for them thus to come.

"Once admitted such patients may receive the same careful study and observation at the hands of a large and experienced staff, as other hospital inmates, to ascertain the nature and causes of their malady and the best methods of cure. They are to be treated by the most approved methods and amid surroundings which will favor a speedy restoration of health. They can have prolonged baths if continuously excited, hydrotherapy if depressed or nervously exhausted, mechanotherapy and gymnastics if debilitated and appropriate occupations and diversions when they are convalescent. Medical care, good nursing and proper food will be equally available and every effort will be made by prompt and skillful treatment to prevent the disease from becoming confirmed and to hasten the period of convalescence.

"When convalescence has been fully established and the patient is permitted to return home the watchful care of the Phipps Clinic will still be over him through the agency of a member of the staff, whose duty it will be to ascertain home conditions and supply what may be lacking in the way of advice and watchful care or treatment to prevent a return of the disorder. It is thus hoped to cure speedily those who can be helped in order to prevent the great increase of chronic insanity, which is proving such a burden to every State of the Union. This will mean much to Baltimore and Maryland, as from the nature of things the majority of patients will come from the immediate vicinity of the Phipps Clinic.

"The utilization of the Clinic for the instruction of medical students and of physicians generally in the diagnosis and treat-

ment of insanity will be of great service to the country at large. Here are large and finely equipped laboratories for the diagnosis and study of insanity in every stage under the supervision of skilled men and an ample medical staff to engage in the work of instruction. It is confidently expected that the opening of this Clinic will mark a new development in the hospital treatment of mental diseases."

MEDICAL EDUCATION—ECONOMIC CONSIDERATIONS. On account of the large investment of time and expense in training men for medical practice, theoretically, every man who matriculates, should graduate—and practice. In 1911, there was about one graduate for every five students; in 1912, the ratio was almost the ideal one of 1:4, but this was due largely to diminution in the freshman classes—in itself a favorable factor.

It costs about \$480 a year in the average Class A medical school for the training of each student, for which the student pays an average fee of \$125.

Sectarian medicine is now practically limited to homeopathy, whose colleges have dropped from 22 in 1900 to 10 in 1912, the attendance having fallen from 1909 to 827 and the annual graduates from 120 to 185. Of eclectic schools only six are extant, which graduated 92 men in 1912, leaving only about 200 undergraduate students in the present three upper classes. Physio-medical and nondescript schools are a dead issue. It is obvious that a further shrinkage in eclectic schools must follow shortly, and the status of the homeopathic colleges is, in the main, such that the nominal objection to division of the profession amounts to little practically, even if it were important numerically.

The four-year course is universal and the five-year course is in sight. Only a very few weak schools exist whose standards of education would not have been considered ideal in 1900. With minor exceptions, the preliminary of a high school education is an established fact, and several states and a considerable number of colleges insist on at least a partial college course, while nearly one graduate in every six actually holds a college degree.

Centenarians.

Mrs. Polly Trinkle died March 11, 1913, at Bristol, Tenn., aged 113.

Thomas Sullivan of Williams Bay, Wis., celebrated his 112th birthday March 10, 1913, by swimming in the bay. He claimed

that this was his 100th annual swim. He is the keeper of a summer resort.

Mrs. Barbara Ann Dillinger of Stoneboro, Pa., a real daughter of the Revolution, died March 25, 1913, aged 104, after a short sickness.

Rev. P. Carylton of Falmouth, Eng., has recently celebrated his 100th birthday.

Alexander Daylight, an Indian of Kettle Falls, Wash., died about March 1, aged 114.

Milo Warrick and his wife of East Liverpool, O., celebrated their 80th wedding anniversary March 18. Mr. Warrick is 100 years old, his wife a few years younger.

Samuel Keefer, a farmer near Penn Yan, N. Y., has passed his 103d birthday. He is the oldest living graduate of the Albany Normal School. His sole attack of illness was from blood poisoning ninety years ago. He is still active and does most of his reading without glasses.

Jean Phillippe Vallee of Bar-le-duc, Belgium, a veteran of the Revolution of 1830, is living at the age of 104.

Maria Tom, a gypsy of Savannah, Ga., is in good health, in spite of having smoked practically all her life, at the age of 109.

James Ward, a native of Ireland, died in the Industrial Home of St. Catherines, Ont., April 8, aged 106, after only a week's illness.

Mrs. Martha Bowers died at the State Odd Fellows' Home of Lockport March 18, aged 102.

Rev. David J. Higgins, a retired clergyman living near Los Angeles, holding bachelor's, master's and D. D. degrees, has applied for admission to Hamline College to secure the degree of Ph. D. He is over 90.

The following notes are from the *Boston M. and S. Journal*: John Munsinger of Howard, Kan., is said to have been born on Dec. 14, 1812, and to have already 144 living descendants. He attributes his excellent health to his moderation in all things. He has never tasted alcoholic beverage, but has smoked tobacco temperately for the past 80 years.

Charles Weidner of Sparkhill, Rockland county, N. Y., is said to have been born on March 14, 1811. He can still read without glasses. He eats sparingly, and never uses alcohol or tobacco.

Jean Boudin of Toronto, Canada, is locally reputed to be 122 years old. He has one living great-granddaughter. His longevity he ascribes to a diet of baked apples, brown bread, and boiled milk. He drinks no alcohol, but smokes tobacco freely.

Mr. W. Allison, a veterinary surgeon, who died recently at Harrowgate, England, is said to have been born on Dec. 4, 1812.

Rev. Abraham Isaac Trager, a rabbi who died recently at Charleston, S. C., is said to have been born in 1807 in Russia. He migrated to New York in 1850. He is survived by two aged daughters, 23 grandchildren and 30 great-grandchildren.

AN AMERICAN COLLEGE OF SURGEONS was organized in Washington May 5. Four hundred and fifty prominent surgeons of North America came together at the invitation of an organization committee appointed by the Clinical Congress of Surgeons of North America in November, 1912, consisting of Edward Martin of Philadelphia, Emmet Rixford of San Francisco, John B. Murphy of Chicago, Rudolph Matas of New Orleans, Albert J. Ochsner of Chicago, Charles H. Mayo of Rochester, Minn., Frederic J. Cotton of Boston, George Emerson Brewer of New York City, J. M. T. Finney of Baltimore, W. W. Chipman of Montreal, George W. Crile of Cleveland and Franklin H. Martin of Chicago.

Each large university city on the continent was visited by a member of the committee who met a group of selected men. Of 500 invited to the meeting in Washington 450 responded, representing all branches of surgery, and were designated Founders of the College.

The call of the meeting summarizes the work for which the committee was authorized:

"1. It should formulate a minimum standard of requirements which should be possessed by any authorized graduate in medicine, who is allowed to perform independently surgical operations in general surgery or any of its specialties.

"2. It should consider the desirability of listing the names of those men who desire to practice surgery and who come under the authorized requirements.

"3. It should seek the means of legalizing under national, colonial, state or provincial laws, a distinct degree supplementing the medical degree, which shall be conferred upon physicians possessing the requirements recognized by this law as necessary to be possessed by operating surgeons.

"4. It should seek co-operation with the medical schools of the continent which have the right to confer the degree of M. D., under the present recognized standards, and urge these colleges to confer a supplementary degree on each of its graduates who have, in addition to their medical course, fulfilled the necessary apprenticeship in surgical hospitals, operative laboratories and actual operative surgery.

"5. It should authorize and popularize the use of this title by men upon whom it is conferred, and its use should especially be urged in all directories of physicians in order that the laity as well as medical men can distinguish between the men who have been authorized to practice surgery, and those who have not."

"The net result of the committee's efforts is that five hundred surgeons of all specialties, representing every large center of population, every important university city with a teaching faculty of medicine, every special and general society representing a specialty of surgery, all the important surgical clinics and hospitals, besides many independent surgeons from all portions of the North American continent, have consented to become founders of the organization under contemplation, and of this five hundred fully four hundred and fifty are here at this hour ready to fulfill their obligation."

BY-LAWS.

I. The NAME of the corporation is the College of Surgeons.

II. The OBJECT of the College shall be to elevate the standard of surgery, to provide a method of granting fellowships in the organization and to formulate a plan which will indicate to the public and the profession that the surgeon possessing such a fellowship is especially qualified to practice surgery as a specialty.

III. ORGANIZATION. The corporation is to be known as the College. The College shall consist of all members of the corporation, to be known as Fellows, and shall vest the general management of the corporation in a Board of Governors, and the Board of Governors shall in turn vest the details of the management in a board of trustees, to be known as the Board of Regents.

IV. ADMINISTRATIVE PLANS. 1. The Board of Governors shall consist of the five hundred surgeons invited by the Organization Committee to serve as founders of the College and who have signified their willingness to act in that capacity. The individuals of the first Board of Governors shall also be known as the founders of the College of Surgeons.

This original Board of Governors shall be divided into three classes, to serve one, two and three years. At the annual meeting in 1914, and at each succeeding annual meeting, the Fellows of the College shall elect fifty surgeons to membership in the Board of Governors, each for a term of three years. Thirty of these are to be elected from a list of nominations consisting of two members each, nominated by the following surgical societies and associations of North America:

American Surgical Association. Section on Surgery of the American Medical Association. Section on Obstetrics, Gynecology and Abdominal surgery of the American Medical Association. General Surgical Division of the Clinical Congress of Surgeons of North America. Division of Surgical Specialties of the Clinical Congress of Surgeons of North America. American Gynecological Society. Southern Surgical and Gynecological Association. Western Surgical Association. Section on Surgery of the Canadian Medical Association. American Association of Obstetricians and Gynecologists. American Orthopedic Association. American Association of Genito Urinary Surgeons. American Laryngological Society. American Ophthalmological Society. American Otological Society.

Twenty members shall be elected at large to represent surgeons of North America not affiliated with the above societies or associations.

The Board of Regents shall consist of twelve surgeons, members of the Board of Governors, elected by the Governors, these to be divided into three classes whose terms of service shall expire in one, two and three years. Their successors shall be elected each for a term of three years. Not more than three of each class of four shall be elected from one country. The Board of Regents is increased to fifteen in number by three officers of the Corporation, the President, Treasurer and General Secretary. The two Vice-Presidents are ex-officio members of the Board. The Board of Regents is the administrative body of the corporation, corresponding to a board of trustees in other corporations.

V. FELLOWSHIPS. The Fellows of the College shall be graduates in medicine, who are legalized to practice medicine in their states and provinces, who have made an application for fellowship, such application to be endorsed by three Fellows of the College, one of whom shall be a member of the Board of Governors, and who meet the qualification requirements that shall from time to time, be established by the Board of Regents, and who shall be elected to fellowship by the Board of Regents on recommendation of the Committee on Credentials.

All Fellows of the College shall be designated a Fellow of the College of Surgeons and shall be authorized and encouraged to use the letters F. C. S. after his name on professional cards, in professional directories and in scientific articles published in surgical literature.

VI. FEES. An initiation fee of Twenty-five Dollars shall be required of each member of the College on his election to fellowship by the Board of Regents. The annual dues will be Five Dollars.

VII. DIRECTORY. The Board of Regents shall issue each year a directory containing the names and addresses of the Fellows of the College of Surgeons, arranged by states, provinces and colonies.

VIII. EXPULSION. Any member of the College may be expelled for unprofessional or other conduct inconsistent with the rules and regulations of this Corporation by a majority vote of the Board of Regents.

IX. STANDING COMMITTEES. The Board of Regents shall elect the following standing committees: 1. Credentials. 2. Legislation. 3. Graduate Schools and Hospitals.

These by-laws were unanimously adopted with the provision that the Board of Regents should make any minor corrections deemed desirable and present such corrections for adoption at the next meeting of the Board of Governors.

OFFICERS ELECTED.

President, J. M. T. Finney, Maryland; First Vice-President, W. W. Chipman, Quebec; Second Vice-President, Rudolph Matas, Louisiana; Treasurer, A. J. Ochsner, Illinois; General Secretary, Franklin H. Martin, Illinois.

BOARD OF REGENTS.

J. M. T. Finney, Maryland; A. J. Ochsner, Illinois; Franklin H. Martin, Illinois; George E. Brewer, New York; George E. Armstrong, Quebec; John B. Murphy, Illinois; Edward Martin, Pennsylvania; F. J. Cotton, Massachusetts; Herbert A. Bruce, Ontario; C. F. Stokes, Washington, D. C.; William D. Haggard, Tennessee; George W. Crile, Ohio; Robert E. McKechnie, British Columbia; Charles H. Mayo, Minnesota; Harry M. Sherman, California.

SELECTION OF FELLOWS.

The prospective Fellows are to be divided into four classes. Classes A, B and C are to be admitted without the formality of submitting to an examination.

The A class shall consist of founders of the College.

The B class shall consist of the members of the special surgical societies constituting the Congress of American Physicians and Surgeons and one hundred each, nominated by accredited committees, from the Surgical Section of the American Medical Association, from the section on Obstetrics, Gynecology and Abdominal Surgery of the American Medical Association, from the General Surgical Section of the Clinical Congress of Surgeons of North America, from the Division of Surgical Specialties of the Clinical Congress of Surgeons of North America, from

the American Association of Obstetricians and Gynecologists, from the Surgical Section of the Canadian Medical Association, from the Southern Surgical and Gynecological Association and from the Western Surgical Association.

The C class shall consist of surgeons of prominence of five years in the practice of surgery or a surgical specialty and who, in the opinion of the Committee on Credentials, are eligible for fellowship in the College without formal examination.

For all others, coming under Class D, it was resolved that the Board of Regents, through the Committee on Credentials, limit the admission of the Fellows to classes A, B and C until the Board of Regents formulates a standard of requirements for class D and reports the recommendations back to the Board of Governors for approval at the meetings to be called by the Board of Regents in Chicago, November, 1913.

APPLICATIONS FOR FELLOWSHIPS.

It will be the spirit of this Association to open the fellowship to all competitors in surgery without favor. Scientific attainments, surgical ability, unquestioned moral character, measured by the College's standards, shall constitute the measure for fellowship.

There are many hundreds of surgeons on the continent who are not included in classes A and B, who fall into the C class. Applications from these men will be welcome and their names will have the most careful consideration by the Committee on Credentials.

All applications for membership should be forwarded to the Secretary of the corporation. It would add to the ease of the work of the Committee on Credentials if references in the way of vouchers or recommendations from one or more well known surgeons accompany each application for fellowship.

FORMAL CONFERRING OF FELLOWSHIPS.

The first convocation for the formal conferring of fellowships will occur in November, 1913, at a time and place that will be designated later. The first directory of Fellows will be distributed at that meeting. For that reason the applications for fellowships on the part of A, B and C classes should be filed as promptly as possible in order to facilitate the correcting of lists for publication.

We publish the foregoing announcement almost in full, as it deserves the careful attention of the profession. Specialism has never, hitherto, been officially and legally recognized, but has depended upon individual effort and the achievement of personal recognition of skill. If this plan succeeds, it will afford a pre-

cedent for the future establishment of standards of admission to other specialties. The initiators of the American College of Surgeons seem to have foreseen and to have avoided the establishment of a professional aristocracy, so far as is consistent with the formulation of necessary standards of admission. Specialism is inevitable with the perfection and extension of any branch of science and art. It is obviously liable to be exploited for private ends, if not properly controled, and, on the other hand, there is already an unfortunate tendency on the part of certain specialists to regard themselves as more or less apart from the general profession of medicine. This tendency must be avoided in the interests of professional solidarity. A very delicate problem in the formal recognition of specialization is to provide for the transition stage from general to special practice—and we believe that every specialist in a practical branch should have experience of a few years in general practice. Another equally difficult problem is that of the man who, by reason of such circumstances as small population or personal choice, wishes to deal with a certain specialty without abandoning general practice. This problem is especially difficult because it is impossible to distinguish formally and legally between the sincere and well qualified general practitioner with a hobby and the mercenary dollar-hunter equipped with a double-barreled gun for all classes of game. Still another problem is to provide for necessary attendance on emergent surgical cases by general practitioners when the delay of obtaining an accredited surgeon would outweigh the greater risk of operation by one relatively inexperienced, and for distinction between cases requiring special skill and those of minor nature properly included in general practice.

In no hostile spirit it may be suggested that the College of Surgeons should clearly recognize that it is a poor rule that does not work both ways. It is of common occurrence that surgeons, perfectly competent as operators, overlook points in alimentary and other branches of physiologic chemistry, in methods of diagnosis, in ordinary physiology, etc., so that their work results quite as fatally as an operation undertaken by a physician without proper skill and equipment. Any formal limitation of special work to a special branch of the profession must recognize that specialism is exclusive as well as inclusive.

PROPOSED A. M. A. SECTION ON GASTRO-ENTEROLOGY AND PROCTOLOGY. Dr. Anthony Bassler, 126 E. 60, N. Y., is circulating a petition for the establishment of such a section. There is much to be said for and against this proposition. From one standpoint it is undesirable to duplicate the special functions of

the respective associations already in existence; from another, the exclusiveness and small numbers of these associations leaves a need for such a section open to all members of the A. M. A. Embarrassment might be caused if the members of these organizations took an active part in the more popular section while maintaining their associations of limited membership, while bad feeling might result if the latter held aloof from the new section if it be formed. From quite a different viewpoint the question must be considered just how far it is profitable and desirable to break up the great national gathering into sections and whether except in the case of well established and numerically strong specialties it is worth while to pass beyond the line of considering special problems in the general medical and surgical sections and to substitute for the joint meetings of certain sections a definite section confining itself to the medical, surgical and chemic problems of this or any other phase of medicine. These questions can be best answered by the actual results obtained by circulating the petition, provided that those favoring it realize fully that they are committing themselves to a separation of interests from those of the more general sections already existing.

A TYPHOID EPIDEMIC has followed the inundation of Albany's filtration plant during the flood late in April.

SEIZURE OF COCAINE. Eight hundred pounds, valued at \$50,000, smuggled from Mexico, was seized in San Francisco, April 8.

AMALGAMATION OF MEDICAL SCHOOLS. The expected merger of the Baltimore Medical College and the Medical Department of the University of Maryland has been officially announced.

CIVIL SERVICE EXAMINATIONS. We received during the first week of May announcements of examinations for positions as physicians, dentist and dental interne, to be held June 4. It is impossible for a monthly journal appearing about the first of the month to make such announcements in time for candidates to secure the necessary papers, and we urge the Civil Service to give longer notice of future examinations.

ARMY MEDICAL CORPS EXAMINATIONS will be held at places to be designated later, on July 14. Applications should be made to the Surgeon General, U. S. Army, Washington, D. C. There are at present forty vacancies to be filled. Successful candidates will be commissioned First Lieutenant in the Army Medical Corps.

AUTOMOBILES killed 967 and injured 6107 persons in New York State, last year.

CANCER SERUM. That recently announced by Dr. Howard W. Nowell of Boston University has produced immunity and apparently cures of implanted human cancer in rabbits. Fifty patients have shown favorable immediate results. It is to Dr. Nowell's credit that he disclaims a positive cure and that he expressly advises against reliance on the serum in operable cases.

HISTORICAL MEDICAL MUSEUM. The Historical Medical Museum, organized by Mr. Henry S. Wellcome, which is to be opened in London towards the end of June next, will include some objects of exceptional historical medical interest.

An important exhibit in the science section will be a large collection of the original apparatus used by the famous Galvani in making his first experiments in Galvanism in the eighteenth century.

A remarkable collection of votive offerings for health will be exhibited. The custom of presenting these offerings in cases of sickness is a very ancient one, and the collection that will be shown is probably the finest ever brought together. It will include Graeco-Roman votive offerings of special anatomical and pathological interests in silver, bronze, marble and terra cotta, together with a number of similar objects used for the same purpose in medieval and modern times.

Ancient microscopes and optical instruments, gathered from all quarters of Europe, will form another important feature, and a selection of surgical instruments used by famous surgeons when operating on historical personages is promised.

The collection of amulets and charms connected with English folk medicine will be very complete, and will constitute an exhibit of more than ordinary interest.

A fine collection of early medical medals and coins from the Graeco-Roman period, ancient manuscripts and early printed medical books, will also be shown, together with many other objects of interest to medical and scientific men.

CONSUMPTION OF SUGAR. Excepting that the extensive industry of preserving for export makes the nominal per capita consumption of sugar about three pounds more for Great Britain, the United States leads the world in the use of sugar—nearly forty pounds. This equals an average daily consumption of a trifle over fifty grams, which is well within physiologic limits.

FRIEDMANN VACCINE. It is scarcely necessary to comment on the marked contrast between Nowell's and Friedmann's announcements and methods. It is worth while, however, to emphasize the fact that the ethical issues connected with the latter are by no means so important as the actual results obtained. In view of the recent unfavorable report of the Public Health Service, we beg leave to reiterate our statement made a couple of months ago, that at least two years must elapse before a final decision can be reached. A discovery may fall far short of being a positive cure and yet have enormous value, especially after accumulated experience enables a better judgment of appropriate cases, of dosage, etc.

LEGAL STATUS OF TALKING IN SLEEP. The Supreme Court of Colorado has recently decided that a confession by this means does not hold, on the ground that it is not voluntary. The prisoner, charged with murder, repeated in his sleep the words, "I killed her." It should also be considered that aside from the legal technicality involved, such a confession really means nothing. The theory has recently been advanced that ambidexterous persons do not dream. The writer is nearly ambidexterous and nearly dreamless, but, in a limited personal experience and a considerable second-hand experience drawn from many sources, dreams by no means represent actual occurrences. The words of the prisoner undoubtedly indicated that, in his sleep, he dreamed of being a murderer. Under the strong suggestion of criminal proceedings, an innocent man would be just about as likely as a guilty one to use the language mentioned.

PRESCRIPTIONS IN ENGLISH. A bill has been introduced into the Nebraska legislature by Mr. Smith, which provides that English shall be used in the writing of all prescriptions, and forbids the use of any other language. A similar bill has been introduced into the North Dakota legislature by Mr. Davidson.

While it is the obvious intention of this bill to prevent mistakes, it must be borne in mind that the terms coined for many synthetics are scarcely English, and no more simple without the genitive ending than with it. Moreover, the use of English words for the older *materia medica* would, in many instances, lead to confusion, whereas the Latin term is definite and official.

ANALYSES OF NIAGARA RIVER WATER are being carried on by the national and state health authorities, with the co-operation of various local health boards, in order to solve some of the problems of water supply and sewerage of the Niagara Frontier.

OSTEOPATHS ALLOWED TO SIGN DEATH CERTIFICATES. This action was taken by the N. Y. City Board of Health, May 7. This strikes us as logical. If a special kind of practitioner is allowed to treat disease, let him assume the responsibility of death. Moreover, the older we grow, the more we favor the personal liberty of every adult, legally *compos mentis*, to make his own decisions, even if wiser persons regard them as detrimental to his own welfare. And, the more we favor competition, not by exclusion, but by making good along our own lines. Of course, this does not imply that we believe in allowing everyone to jeopardize the health of the community.

THE BUFFALO EDUCATIONAL UNION now includes the University of Buffalo along with such other educational institutions as the Public Library, Art Gallery, Historical Society, Society of Natural Sciences, and Grosvenor Library. This is in line with the Chicago idea, favorably noted in our columns last year. Perhaps the systematic co-operation of the various educational institutions now available may yet solve the problem of a collegiate department. We have the libraries, museums, an available teaching force, exceptional advantages for field work along certain scientific lines and for many branches of engineering. All that is needed is enough tainted money to crystalize these into a college. And we bespeak similar educational unions for other cities in our territory and even the smaller towns.

DARTMOUTH COLLEGE MEDICAL SCHOOL, established in 1798, and fourth in age in the country, will be discontinued except for preparatory courses, after the graduation of the class of 1914. This voluntary dissolution, due to the impossibility of maintaining modern standards without the clinical material of a large city, is a commendable precedent.

PIGS WITH UNCLOVEN HOOF. A. L. Benedict of New Canaan, Conn. (probably a distant cousin of the Editor), and A. V. Barnes, of the firm of A. S. Barnes & Co., each have litters of pigs showing this peculiarity in about half the number. These litters were bred from a similar freak sire discovered in Ohio by the late Dr. P. H. Hiss, the bacteriologist. This exemplification of the Mendelian law is interesting. It is said that such pigs are immune to hog cholera.

The graduating exercises of the TRAINING SCHOOL OF THE BUFFALO HOMEOPATHIC HOSPITAL will be held June 3 at the Assembly Room of the Hospital.

THE TRAVEL STUDY TOUR OF AMERICAN PHYSICIANS to the XVII International Congress of Medicine will sail from New York on July 3d, on the North German Lloyd steamship "Bremen." About 75 physicians will participate in this tour, the chairman of which is Dr. W. B. De Garmo, New York City, Secretary, Dr. Richard Kovacs, 236 East 69th street, New York. In co-operation with the International Committee for Postgraduate Medical Education, arrangements have been made to visit Dresden, Berlin, Cologne, Brussels, etc. (clinics and hospitals at Paris, Munich, Vienna), and inspect the health resorts of Carlsbad, Marienbad, Nauheim, Hamburg, Wiesbaden. No American party ever enjoyed similar privileges. The party will finally attend the International Congress of Medicine August 6th to 12th in London.

NEW POWERS TO STATE HEALTH DEPARTMENT. Gov. Sulzer has signed the bill dividing New York State into twenty health districts, each with a medical officer, and providing for the inspection of cold storage plants, hotel and restaurant kitchens, and otherwise increasing the powers of the State Health authorities.

PREVENTION OF DUST IN BUFFALO. Health Commissioner Fronczak has formulated an ordinance which, if passed, will forbid the beating of rugs and emptying of dust out doors. Male posterity will doubtless erect a monument to him as the man who robbed house cleaning of its terrors. The ingenuity of housewives, who cannot afford to send carpets and rugs to steam cleaning works, will be taxed to devise means not to let the dirt accumulate indoors.

RAILROAD RATES TO MEDICAL CONVENTIONS. The rather illiberal treatment of the medical profession in this respect leads us to inquire why physicians should not have the same rates as Sunday School teachers, fraternal organizations, commercial associations and others. But, better than a demand for special concessions, would be the universal enforcement of a 2-cent rate all over the country, with a cent and a-half rate for any round-trip completed within two weeks, either in the ordinary sense of a passage back and forth between two points, or in the more correct sense of a loop-trip (rundreise), with the privilege of choice of routes and stop-overs, with and without formality, as in Europe.

SOCIETY MEETINGS.

Brief reports and announcements of meetings of societies of Western New York and of those of general scope are requested from secretaries. Copy should be on hand by the fifteenth of each month. Full transactions will be published at cost of composition.

A regular meeting of the MEDICAL SOCIETY OF THE COUNTY OF ERIE was held in the Buffalo Library Building on April 21st, 1913, at 8:40 p. m., President Whitwell presiding.

Minutes of previous meeting held February 17th, 1913, were read and approved, as were also the minutes of the Council meetings of March 3d and April 7th, 1913.

Dr. Bonnar, Chairman of the Board of Censors, made his report.

On motion of Dr. McKee the foregoing report was adopted.

No reports were received from chairmen of standing committees.

Dr. William H. Thornton, Chairman of the Special Committee on Collection of Accounts, made a partial report.

The committee had postal cards printed and sent to the members of the society. About 30 per cent. of the members replied.

Committee, therefore, reported progress and was given further time.

Dr. Wall said that, at the last meeting of the A. M. A., a proposal was made for changing the by-laws covering three classes of members. He moved that it is the sense of this society that the proposed new amendments to the by-laws making three classes of members in the A. M. A. be approved.

Dr. Bennett asked if this motion carried with it instructions to delegates to the State Society to that effect. Dr. Wall replied that it would. Dr. Bennett then stated that he would be opposed to the motion for the reason that the society knew too little about this matter to instruct its delegates as to how to vote.

Dr. McKee moved as an amendment that the entire matter be referred to the delegates to the State Society.

Dr. Wall accepted this amendment, which was then carried.

Dr. Crego moved that a committee of three be appointed to investigate the question of fees for examination in lunacy and report at the next meeting of the society. Carried.

Dr. McKee said that the next meeting of the State Society would be held in Rochester next week; that this was the first time in the history of the State Society that it has met outside of Albany. He, therefore, moved that the Secretary be instructed to get out postal cards to members reminding them of this meeting and urging their attendance.

This completed, the regular business and the scientific program was taken up, as follows:

A paper on "Air, Water and Salts," by Dr. Henry R. Hopkins.

A paper on "Sane or Insane," by Sydney A. Dunham.

Both papers were discussed by the members present, after which the meeting adjourned.

FRANKLIN C. GRAM, Secretary.

(Received too late for last issue.)

Report of Progress of the Buffalo Society of Sanitary and Moral Prophylaxis.

One of the most encouraging and enlightening efforts which have been made of late years for improved sanitation is that which has for its object the restriction of the ravages of venereal diseases.

Hardly more than half a dozen years ago physicians began to organize for this purpose. Later they were joined by influential laymen, and now organizations called Societies of Sanitary and Moral Prophylaxis, or by some similar name, are scattered throughout the United States. The Buffalo branch of this society held its annual meeting recently, and the report of progress presented by the President, Dr. Lucien Howe, we publish in full.

It is due to the members of this Society, and it may be of some interest to affiliated workers, to know what the Society has accomplished during the past year.

As one of our principal objects is to awaken in the public mind an appreciation of the importance of sex hygiene, and to make known the terrible results of venereal diseases, it has therefore seemed better to accomplish this end by teaching. For this purpose the following lectures have been delivered:

At the University of Buffalo—February 2d, Dr. F. W. Barrows, "Sanitary and Moral Prophylaxis." To men. February 9th, Dr. Rosalie S. Morton of New York, "Sanitary and Moral Prophylaxis." To women.

At the Twentieth Century Club—February 6th, Dr. Lucien Howe, "Race Improvement and Better Breeding." February 20th, Dr. Herman G. Matzinger and Miss Frances Ney, "Who Are the Mentally Defective, and What to Do About It?" March 7th, Dr. Helene Kuhlman, "Mental Hygiene."

Dr. Rosalie S. Morton came partly at the request of the officers of this Society, and of the University Committee on Public Lectures, but especially as the representative of the State Board of Health.

In addition to these lectures more informal addresses on sex hygiene and related topics have been given by physicians and

other members of the Society at schools, and before small organizations. Competent speakers and teachers can always be furnished free of charge to groups interested in the subject. Mothers are ready to give other mothers facts which daughters should know, and fathers tell other fathers how and why their sons should not start out blindfolded to meet temptation, disease, suffering and sometimes early death.

The reasons for the existence of such a society as this have been stated too often to be repeated here. It is only necessary to recall the fact, for example, that over fifty per cent. of the blindness is due to venereal disease. The surest and best way to prevent blindness is to remove this cause. All others are secondary.

It may be mentioned also that New York pays several hundred thousand dollars each year for insane patients in its hospitals suffering from one disease only—syphilitic paresis. These and other examples of which we are gradually learning could be multiplied indefinitely; the public is awakening to the importance of the subject.

It is only about eight years ago that the first Society of this kind was formed in America. Since then State societies, having the same objects and usually the same name, have been organized in Pennsylvania, Maryland, Missouri, Indiana, Michigan, Colorado and other states, and numerous local branches are being established.

People as a whole are beginning to realize that our schools teach physiology but cannot teach sex hygiene; our pulpits teach morals, but many essential points cannot be dealt with there. Meanwhile married women are constantly exposed, largely because of the ignorance of their husbands, and our sons are in constant danger physically and morally. A Society of Sanitary and Moral Prophylaxis is therefore in a certain way a clearing house for valuable energies, too often pent up, or not well directed. In its educational department it aims to teach parents how to teach their children, also to prevent spread of disease, and to make practical application of the lessons from the pulpit.

The dues of a dollar a year are trifling, and the work required of each family is usually such as coincides with the natural duties of a parent, or is in accord with the member's profession or other occupation. If men and women find it worth while to sustain schools, hospitals and churches, is it not also worth while to add numbers and strength to a society like this in Buffalo, as has been done in many other cities, and thus push forward the movement for cleaner and better living?

THE AMERICAN PROCTOLOGIC SOCIETY will hold its fifteenth annual meeting at the Hotel Radisson, Minneapolis, June 16 and 17, under the presidency of Dr. L. J. Hirschman of Detroit. The Secretary is Dr. L. H. Adler of Philadelphia. There are 34 active fellows, 6 honorary, 6 associates and 7 candidates for membership. None is from our special territory. An interesting program of twenty papers is announced.

THE MEDICO-LEGAL SOCIETY held a jubilee meeting at the Waldorf-Astoria in New York May 21, to commemorate the thirtieth anniversary of the founding of the *Medico-Legal Journal*. The President is Dr. T. D. Crothers of New Haven and the Secretary and Editor of the *Journal* is Mr. Clark Bell, who was President of the Society forty years ago.

THE MONDAY CLUB of Rochester held a dinner April 29 at which Dr. Howard Kelly of Baltimore gave an address on the control of the social evil in his city. The President, Dr. John R. Williams, acted as toastmaster.

The annual meeting and dinner of the AMERICAN MEDICAL EDITORS' ASSOCIATION will be held at the Hotel Radisson, Minneapolis, June 16.

The sixteenth annual meeting of the AMERICAN GASTRO-ENTEROLOGIC ASSOCIATION was held in Washington, May 5 and 6. The members were entertained at luncheon by Dr. William Gerry Morgan of Washington.

THE ELMIRA ACADEMY OF MEDICINE met May 7. Papers were presented by Dr. M. L. Bennett of Watkins on "Abscess of the Liver; by Dr. A. W. Booth of Elmira on the "Significance of Haemorrhage from the Mucous Membranes"; by Dr. R. B. Howland of Elmira on "Erysipelas with Rare Complications."

THE WOMEN'S MEDICAL SOCIETY OF NEW YORK STATE met in Rochester just before the Medical Society of the State of New York. Two hundred women were in attendance. Dr. Marion Craig Potter of Rochester was elected President, Dr. Helene J. C. Kuhlman of Buffalo retiring.

A regular meeting of the ROCHESTER PATHOLOGICAL SOCIETY was held April 3d, 1913. Reader, Dr. Thos. G. Tousey. Subject, "Secondary Anaemias." Great stress was laid on poor sanitary conditions as being one of the most important causes

(bad air, light, etc.) It was Dr. Tousey's opinion that these causes acted most probably through products of auto-intoxication inhibiting blood formation in the bone marrow.

At the regular meeting April 17th, 1913, the program was: Reader, Dr. H. L. Prince. Subject, "The Abbott Treatment of Lateral Curvature of the Spine." Several lantern slides were shown, showing the marked benefits and improvement over the old treatment.

The Spring meeting of the HOSPITAL MEDICAL SOCIETY OF ROCHESTER was held at the Oak Hill Country Club on Thursday evening, May 22, 1913, at 8:45 o'clock. Speaker, Professor H. L. Fairchild of the University of Rochester, subject, "Maps Showing the Later Glacial History of New York State."

MEDICAL SOCIETY OF THE COUNTY OF MONROE. Regular May meeting held on May 20, 1913, at the rooms of the Rochester Academy of Medicine. The principal business consisted in the election by ballot of a list of fourteen experts in insanity for one year, which had been nominated by the Board of Censors. The list of experts is sent to every court and lawyer in Rochester and Monroe County with a brief note stating that the Society vouches for them. In this simple way, our profession may be able to force a reform in medical expert testimony. This method was proposed by Dr. S. W. Little and put in operation during his term as president of our County Society. No one is obliged to use these experts, but if they are not employed then the medical profession cannot be blamed because of medico-legal scandals. The program consisted of a paper by Dr. M. May Allen on "Methods of Teaching Sex Hygiene."

C. W. HENNINGTON, Secretary.

THE WESTERN N. Y. HOMEOPATHIC MEDICAL SOCIETY, at its meeting in Rochester, April 12, elected the following officers: President, George R. Critchlow of Buffalo; vice-Presidents, Frank Warner of Canandaigua and W. H. Vosburg of Dunkirk; Secretary-Treasurer, R. Montford Schley of Buffalo.

THE AESCULAPIAN CLUB OF BUFFALO recently celebrated its fifteenth anniversary by a dinner at the Buffalo Club, the President, Francis M. O'Gorman, acting as toastmaster.

THE AMERICAN ACADEMY OF MEDICINE will hold its 38th annual meeting at the Leamington Hotel, Minneapolis, June 13-15. A large number of papers dealing with education, child hygiene, sociology, etc., is promised. The profession is invited.

THE ROCHESTER ACADEMY OF MEDICINE, Section of General Medicine, met May 14. Dr. Allen A. Jones of Buffalo gave a lantern slide demonstration of Gastro-Intestinal cases. Dr. Jones was entertained at dinner at the Rochester Club.

THE BUFFALO ACADEMY OF MEDICINE. Announcements of officers elected for the Academy and the Sections will be made in our next issue, and such general announcement as is available will be made during the summer of the papers scheduled for the coming year.

THE MEDICAL AND SURGICAL LEAGUE had its annual meeting and dinner at the Statler Hotel May 8th. Mr. Ernest McIntyre delivered an address on "Medical Expert Testimony." The following officers were elected: President, Dr. Julius Richter; vice-President, Dr. George Seitz; Secretary, Dr. Frank Kleckner; Treasurer, Dr. Edmund Reimann, and Governors, Drs. A. W. Hengerer, George Stesel, Robert Taylor, W. H. Brauns and F. M. O'Gorman.

PERSONALS.

Announcements of removals, travel, and other matters of interest are requested. Please report any errors in the listing of any physician, in the State and other directories that we may co-operate with the State Society in securing a correct list of physicians.

Dr. Nelson G. Russell of Buffalo is absent on a European trip.

Dr. Ulysses B. Stein, Dr. F. C. Busch and Dr. Thomas J. Walsh of Buffalo have recently returned from Europe.

Dr. George B. Stocker has moved to 855 Genesee street, Buffalo.

We recently had the pleasure of meeting our editorial confrere, Dr. Wm. A. Young of Toronto, at the Chalfonte, Atlantic City.

Dr. Herbert Upham Williams of Buffalo has been appointed State Examiner in Bacteriology, vice Dr. Hiss, deceased.

Drs. Charles G. Stockton and A. L. Benedict of Buffalo attended the meeting of the American Gastro-enterologic Association in Washington, just preceding the Congress.

Dr. Roland O. Meisenbach of Buffalo attended the meeting of Orthopaedic Surgeons at the recent congress in Washington.

Dr. Paul P. A. Preble, U. S. Public Health Service, has recently been detailed to Buffalo for temporary duty in examining samples of lake water, on behalf of the American section of the International Joint Commission.

Dr. Walter M. Litchfield of Salamanca was badly injured in an automobile collision, May 8.

Dr. Frank E. Howard of Friendship, while assisting at an operation for appendicitis on a patient whom he had taken to Hornell for that purpose, was himself seized with urgent symptoms and was subjected to the same operation, with success, immediately afterward—May 6.

Dr. G. S. Peterkin announces his removal of offices to the Cobb Building, Seattle, Wash. His practice is limited to Urology.

Dr. Jacob S. Otto of Buffalo has removed his office to 469 Franklin street and his residence to 1094 Delaware avenue.

Dr. H. H. Glosser, who succeeded to the practice and the office of the late Dr. Julius Pohlman, has removed to 448 Franklin street, Buffalo.

Dr. E. L. Bebee has removed to 401 Elmwood avenue, Buffalo.

Dr. Landauer has removed his office to 34 S. Union street, Rochester. Practice confined to Dermatology.

Dr. Sherman Voorhees of Elmira, having been obliged to postpone his trip to Germany, expects to leave some time this month.

Dr. George M. Gould is taking a much needed rest in Atlantic City.

Dr. James F. MacPherson of San Diego, formerly of Tonawanda, has recently spent a month in his former home.

Dr. James W. Markoe received a legacy of \$25,000 a year from the late James Pierpont Morgan. It is strange that so few physicians receive such acknowledgment of their services.

Dr. J. A. Tompkins, Asst. Surgeon, U. S. N., has recently succeeded Dr. H. D. Wilson in charge of the Buffalo recruiting station, who has been ordered to the battleship New Jersey.

The automobile of Dr. S. J. Moyer, Jr., of Lockport was struck by an Erie train May 1, but the occupants escaped serious injury.

A run-away horse leaped into the automobile of Dr. J. J. Brown of Buffalo, May 20. One of his little daughters was stunned but not seriously hurt and some damage was done to the auto.

Dr. George L. Brown of Buffalo has returned from a seven weeks' tour through the South.

Dr. George F. Cott of Buffalo has returned after three months spent in Europe.

Dr. W. B. Cochrane of Rochester has moved to 2097 East avenue.

Dr. Charles M. Gardner, of the U. S. Public Health Service, has recently been transferred from Detroit to Buffalo, succeeding Dr. Duncan A. Carmichael, who has been ordered to the Marine Hospital at Vineyard Haven, Mass.

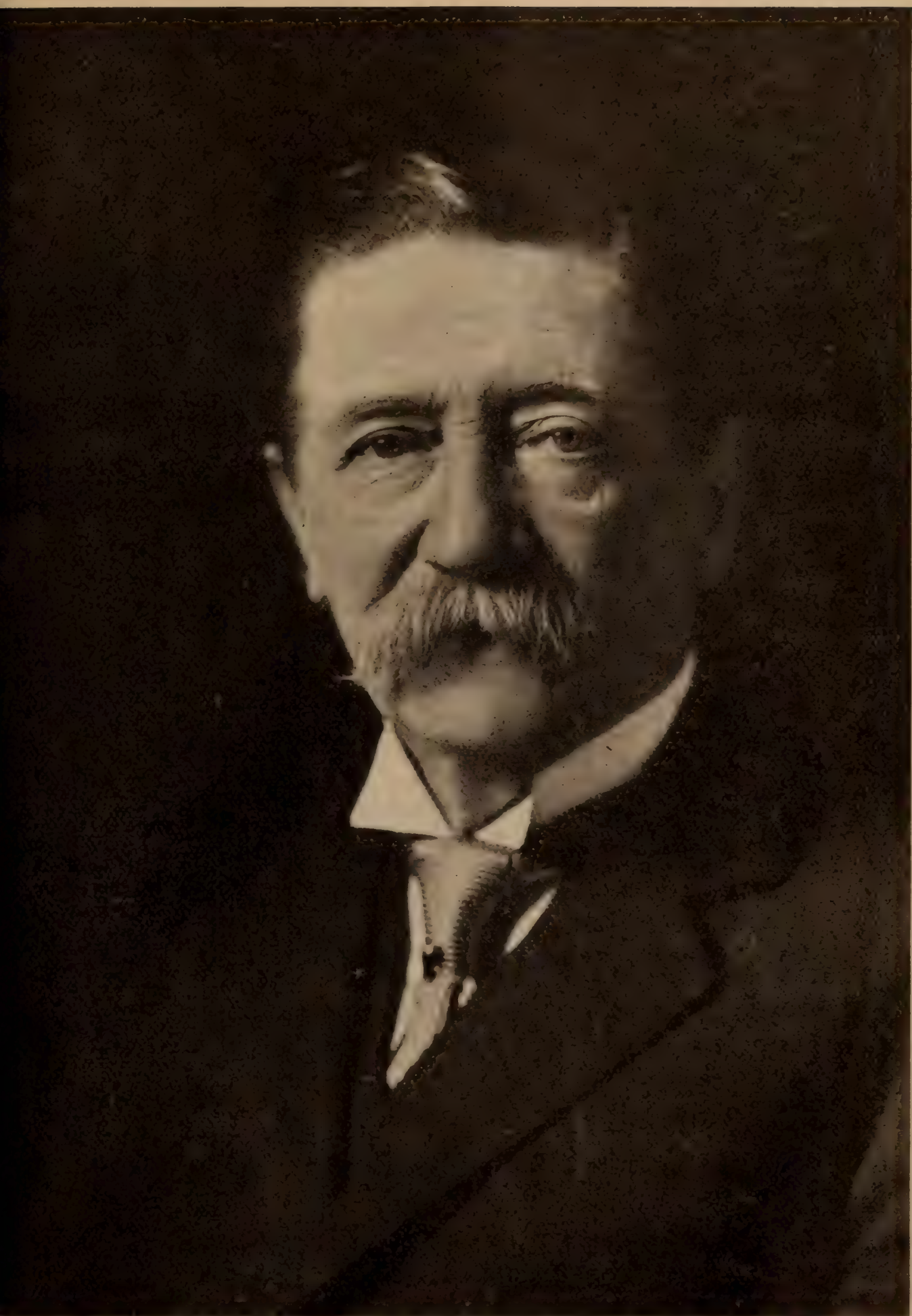
Dr. Harry Mead of Buffalo left May 31, expecting to spend the summer in Europe.

Dr. Henry C. Buswell of Buffalo was married in Philadelphia April 26, to Mrs. George E. Matthews. They have left for a European trip.

OBITUARIES.

Readers are requested to report promptly the death of any physician in Western New York, or former residents of this region, or graduates of any medical school in Western New York and to call the attention of the families of the deceased, our desire to publish adequate obituary notices.

Dr. E. L. Shurley, Buffalo, 1866, died suddenly of heart disease at the Harper Hospital of Detroit, May 17, aged 67. He was born in Buffalo, but went to Detroit in 1872, having had an experience as army surgeon in the Indian campaigns of the late 60's, where he distinguished himself for his bravery. His military service terminated with the Yellowstone campaign of 1870, and he then practiced in Manistee for a couple of years. In Detroit he soon made a name for himself as a laryngologist, his contributions to the therapy of tuberculosis being especially noteworthy. It is a curious coincidence that Dr. Keeley heard



E. L. Shurley - M. D.

his lecture in Chicago on the treatment of tuberculosis with the chlorid of gold and sodium, just before announcing his cure for alcoholism. Dr. Shurley was well known as an author, and held the presidency of the American Laryngological Association and the Michigan State Medical Society, besides being active in various other organizations. Dr. Shurley was a widower and left no children, but his name is carried on by his nephew, Dr. Burt R. Shurley of Detroit. Dr. Shurley not only enjoyed the wide acquaintance in the profession deserved by his contributions to medical science, but was universally esteemed and loved. He always kept up his affiliation with Buffalo, having contributed to this journal, delivered lectures before the Buffalo profession and maintained a personal acquaintance with many of the Buffalo profession. His death will be long felt.

Dr. Louis A. Duhring died in Philadelphia on May 8 at the age of 67 years. He was graduated from the medical department of the University of Pennsylvania in the class of 1867, subsequently serving for fifteen months as interne in the Philadelphia Hospital. Later he went abroad, spending two years in study in Paris, London and Vienna. On returning to Philadelphia in 1870 he established a dispensary for the study and treatment of diseases of the skin, serving as attending physician for a period of seven years, and later becoming consulting physician. In 1871 he was made clinical lecturer on diseases of the skin in the University of Pennsylvania, and in 1876 he was advanced to the professorship of that branch, serving until 1911, when he was made emeritus professor. He was a Fellow of the College of Physicians of Philadelphia, a member and one of the founders of the American Dermatological Association, honorary member of the London, Vienna, and Italian Dermatological Societies, corresponding member of the New York, French and German Dermatological Societies. He was the author of several formal publications dealing with diseases of the skin and a liberal contributor to the literature of the subject.—*Medical Record*.

Dr. Edmund A. Reilly died at Elmira, N. Y., on April 29, 1913. He was born in Elmira April 6, 1860. Dr. Reilly graduated in 1881 from the Medical Department of Western Reserve University.

Dr. William B. Pierce of Buffalo, died at his summer home in Fort Erie, Can., May 22, aged 77. He was born in Friendship, N. Y. His name is not listed in either Polk or the State Directory.

Dr. Byron Clifford Cheesman, P. & S. Baltimore, 1880, died at Watertown, N. Y., April 3, aged 56.

Dr. Theron James, Buffalo, 1889, a practitioner of Medina, died at the Rochester General Hospital, May 4, after an illness of several months, aged 52. Before studying medicine he was a druggist in Medina. He was active in masonry and was a U. S. Pension Examiner from 1895 till his death.

Dr. Orlando Webb Sutton, N. Y. Electic, 1891, died at his home in Bath, April 25.

Dr. S. Jean Stevenson Monroe, Women's Medical College of Pennsylvania, 1870 (1885 according to State Directory), died at Bemus Point, N. Y., January 4, aged 71, of rectal cancer.

Dr. Emma Ardelia Buck Runnion, Syracuse, 1888, a resident of Syracuse, died February 13, of lobar pneumonia, aged 58.

OUR CONTEMPORARIES

The *Medical Times* for April has a valuable symposium on the medical curriculum.

The *Medical Review of Reviews* for March contains the following as part of one of its editorials:

"What is ethics for one should be ethics for all. While practitioners of high professional standing accept rebates, while they publish papers that have no original merit, while they continue to talk in medical meetings upon subjects about which they are not qualified to speak, while they give their views freely to the public, the force of medical ethics can hardly be said to be felt by them. A code of ethics is essential and desirable, but should above all be just and applicable to all members of the profession."

This reminds us that we were criticised, some time ago, for publishing a paper because the author was not one of the elect, although it was conceded that he was in good standing and had written a good article. A large share of the ethical problems and of the quarrels of the profession are due to the fact that men are not willing to accept a broad-minded, democratic, fraternal basis, but insist on a tacit recognition of a professional aristocracy and peasantry. And, the funny side of the matter is, that the trouble is made largely by those who, in ordinary

society, would be considered members of the get-rich-quick aristocracy.

"Dying Words." One of our religious contemporaries prints a list of dying words of celebrated sinners, indicating a fear of Hell that should please the most orthodox. On the other hand, some time ago, we came across a quaint old book recording the dying words of some very pious Quakers, men, women and children, who died about a century ago. We want particularly to avoid the discussion of matters of dogma, but it is not without medical interest to know how frequently dying persons do utter the elaborate religious and other sentiments popularly supposed to be appropriate and customary, at the final leave taking. In our own experience—which we may say has been considerable, without either intending to boast of a large practice or to admit that the fatal termination was a logical result—dying persons have either been quite unconscious or, at least, too weak to express themselves except briefly and, for the most part, on commonplace matters. We do not remember ever to have witnessed the ecstasy of the good or the contrition and fear of the wicked which speakers on religious subjects so frequently mention. Perhaps our readers will think it worth while to state their experience.

CORRESPONDENCE.

This department is intended for the presentation of news and views not coming within the scope of other departments, and particularly to afford opportunity for discussion and criticism of views elsewhere expressed.

Long Distance Consultations.

April 16, 1913.

Buffalo Medical and Surgical Specialists, Buffalo, N. Y.:

Dear Sirs—Having been in poor health and as my son doctored with you a number of years ago, I thought I would write you. I have been poorly about six or eight months. If you think you can do me any good I would like to hear from you right away, for I need some aid. I am able to be up but can't work any. Write me what you think about me. Yours respectfully,

Dear Sir—Your letter was delivered to this journal. There are so many medical and surgical specialists in the city that it would be useless to try to forward the letter. If the postoffice supplied an address it would undoubtedly go to some quack firm advertising under a similar title. Our advice to you is not to write to any

such firm and not to try long-distance treatment even by a physician in good standing, but to consult personally some local physician or, if you feel that you need some special degree of skill, to ask him to refer you to the appropriate specialist in some city near you. Very truly yours,

My Dear Doctor:

If you meet with any cases of cancer, I wish you would please refer them to me. I have made a business of the medical treatment of cancer for — years. My book — is now used on both sides of the Atlantic — gives a record of 100 cases of all forms and how I cured them, also it gives 75 remedies that are curative in cancer —.

The above is not a circular letter, but was addressed to the editor personally. As the writer is not a personal acquaintance, we may be exculpated of the charge of being a cad for printing these extracts, if not of selfishness and prejudice in holding on to such cases as our surgical friends consider inoperable, and of ignorance in confessing that we do not know of a single remedy that is anything like curative in cancer. But we would give \$1000 to have such a case of cholelithiasis.

Kafir Orange.

Washington, D. C.

Editor Buffalo Medical Journal:

Dear Sir—I beg to acknowledge the receipt of your letter relative to the Kafir orange and certain publications of the Department.

The Kafir orange (*Strychnos spinosa*) is, as you doubtless know, a native of Portuguese East Africa and has received this name from its outward resemblance to an orange. The fruit is the size of an orange, or larger, deep green when young and yellow when ripe. It has a very hard shell and numerous flat seeds imbedded in the pulp. The seeds are said to be very poisonous, but the flesh is quite refreshing. Mr. Fairchild, in charge of the office of seed and plant introduction of this bureau, who brought the seed from East Africa for trial in Florida, says of the fruit: "The specimen which we tasted was like a brandied peach into which cloves had been stuck. The spicy aroma of the fruit is perceptible before the hard shell has been broken open."

The seeds planted in Florida produced plants which flourished and developed fruit. A couple of years ago Mr. A. F. Sievers of this office made an examination of one of these Florida fruits for the alkaloids strychnine and brucine. He found neither of the

alkaloids present in any part of the fruit except in the seeds, and only a very slight trace there. The fruit, however, was not fully ripe, and it is possible that the alkaloids are formed only during the final stage of ripening. The fact also that the plant from which the fruit was obtained was grown in Florida and not in Africa, where it is native, may have influenced the alkaloid content. Very truly yours,

R. H. TRUE,

Physiologist in Charge.

Cocaine in Diarrhoea.

Berlin, April 14, 1913.

Esteemed Colleague:

. . . . At present it is impossible to prepare an article for the BUFFALO MEDICAL JOURNAL on account of pressure of other work, but I hope to have that pleasure later. You may have noticed my method of treating diarrhoea with local anaesthetics (*Semaine Medicale*, 1912), corroborated by at least two other writers. The long and short of it is that one gives 10 drops of a 3% cocaine solution, in water, three times a day, before meals—or other local anaesthetics may be used. The practical value of the method lies in the fact that no special diet is required, that no habit is engendered, and that neither obstipation nor other untoward after-effect is produced. . . . I have had no experience with and know of no reference in the literature to such a case as you mention. (Ascites, elephantiasis of both lower limbs, sharply demarcated abdominal wall anasarca with prominent lymphatic channels, reported by the editor, subsequently shown by necropsy to be due to tumor near receptaculum.)

With best wishes,

E. FULD.

BOOK REVIEWS

U. S. PUBLIC HEALTH SERVICE. Annual Report 1912 (fiscal year ending June 30.)

There is probably no public medical service of the country which does the actual amount of work which this accomplishes. Over 50,000 patients are treated annually, nearly 15,000 being seriously sick or injured, so as to require hospital care. Over 10,000 physical examinations are also made. In addition, the investigation and management of epidemic diseases including infections following lines of commerce and transportation which have, happily, been prevented from becoming epidemic, represent a vast amount of work and a great saving of expense to the country. Furthermore, the Service carries on considerable re-

search work and gathers statistics. This is accomplished with 138 commissioned officers and 227 acting assistant surgeons, the former having been increased by three and the latter reduced by 21 since the year before. Assistants of various kinds bring the total personnel of the Service to 1456.

SYSTEMATIC CASE-TAKING. Henry Lawrence McKisack, M. D., M. R. C. P., Belfast. Published by Paul B. Hoeber, 69 E. 59th St., N. Y.; 166 pages; \$1.50.

History taking, general inspection, examination of regions and systems, and certain special considerations as of the Wassermann reaction, are discussed, always succinctly and briefly. Curiously enough, the author presents no elaborate system of blanks for records—which is a wise omission, as each physician can best establish his own system with reference to nature of practice and various personal and local factors.

SIGHT SAVING AS A NATIONAL MOVEMENT. REPORT OF THE COMMITTEE ON PREVENTION OF BLINDNESS of the Council on Health and Public Instruction of the A. M. A.

The first of these pamphlets is by Dr. F. Parke Lewis of Buffalo; the latter is the report of the committee of which he was chairman. When we consider that a great many normal individuals, given their choice between death and blindness, would prefer the former, the intense humanitarian interest of the noble work to prevent blindness, is apparent. The expense to the state is also an important factor. Much of the literature on this subject has reminded the reader of a harp with one string. No writer can neglect the terrible ravages of the gonococcus, but these pamphlets are refreshing in discussing a great variety of causes and methods of prevention of blindness.

THE EASTON SANITARIUM.

This is a copiously illustrated pamphlet, prepared under the direction of the Superintendent, Dr. C. Spencer Kinney of Easton, Pa. The views are so alluring that we regret having no time for a nervous breakdown.

ANNUAL REPORT OF THE AMERICAN TELEPHONE AND TELEGRAPH CO. for the year 1912.

The first exhibition of the telephone was at the Centennial Exhibition in 1876, where it attracted little attention. Even as late as 1890, there were only 200,000 telephones in use in the United States, the rapid initial growth in the 80's having been checked by the introduction of the a la carte method. In 1900

less than 500,000 stations were established. Following the expiration of the patents which prevented competition, and the institution of slot machines at a nickle instead of a dime for a message (the rate is a penny in England) with corresponding decrease in rentals and the return to the American plan of a flat rate in most cities, the Bell Company alone now has almost seven and a half million telephone stations, not to mention the enormous growth of independent services. The net revenue has increased from less than five and a half millions in 1900 to 32,000,000 in 1912. The average net profit per telephone station has been reduced from over \$8.00 to about \$4.50.

Few reports contain such valuable lessons in economics. Competition has paid the consumer; not to mention the capitalists' interests, both by the direct extension of service and by compelling good service and a reduction of rates. Speaking generally, it has paid the men who have borne the burden of a double telephone system, if they had never received or sent a message over the independent lines. It has paid them in actual net saving of expense, two companies having demonstrated that they could live cheaper than one even without the harmony of interests supposed by optimists to bring about this happy result in wedded life. It has paid them in the more rapid and more efficient service, not to mention wear and tear on the nervous system. One of our happiest recollections is of a Bell telephone magnate blaspheming at his own employees and service in the dark days of the beginning of the century when the expense of delivering a message by telephone meant the same cost as a double car fare and not much saving of time over the latter method. Now, thanks to competition, all this has been changed.

Strangely enough, competition has even benefitted the Bell interests; in spite of the pro rata reduction of net profits now amounting to only about 15% of an average rental, the aggregate net profit has increased over 600% as compared with 1900, while the aggregate capital invested has increased only about 250%.

But what an enormous saving in capital, rentals, and what an enormous saving of time, convenience, comfort and even life would have been effected if there had been some way of controlling the telephone business thirty years ago, as it has recently been controlled by competition and by legislation.

Perhaps we ought to add that this review does not consist entirely of extracts from the pamphlet itself.

THE DOCTOR'S DILEMMA, by George Bernard Shaw.

It may be remembered that this section of the JOURNAL formerly bore the broader title of "Books and Authors," and, while it

is usually limited to reviews of new books, it is not necessarily so restricted. Indeed, some months ago we reviewed a book over a century old, and hope to have that pleasure again. The Doctor's Dilemma deals with the problem of selection of patients in the preliminary stage of a sure cure for tuberculosis, when there was a shortage of the remedy. It is peculiarly appropriate at this time when so much interest centers in Friedmann's claims. Curiously enough, the author omits altogether the consideration of the intensely dramatic and inevitable scepticism in the profession, and the resulting conflict of opinion. Shaw is usually regarded as hostile to the medical profession and he is certainly a severe critic in his tediously numerous prefaces and preambles, but, in the play itself, with due allowance for the almost necessary exaggeration of the stage, his portrayal of different types of doctors is founded on fact and is, in the main, friendly. The greatest interest seems to us to lie in his depiction of the ungrateful dead beat.

THE SURGICAL CLINICS OF JOHN B. MURPHY, M. D., at Mercy Hospital, Chicago. Volume II, number 1 (February, 1913). Octavo of 179 pages; illustrated. Philadelphia and London: W. B. Saunders Company, 1913. Published bi-monthly. Price per year, paper, \$8.00; cloth, \$12.00.

This number opens with an address and operation by Mr. W. Arbuthnott Lane of London on the open treatment of Fractures. About half of the remaining clinics are devoted to Murphy's bone surgery. The rest include examples of a great variety of surgical lesions. This "case-system" in surgery is as interesting as in medicine, but possesses similar limitations as to comprehensiveness.

A PRIVILEGED MEDICAL CLASS. Dr. G. Frank Lydston, Chicago; reprint from the *Southern Practitioner*, February, 1913.

Dr. Lydston has done valuable service as the *Advocatus Diaboli* of the profession. Sometimes his arguments are convincing, but we cannot share his foreboding that the Medical Reserve Corps of the U. S. A. is a scheme of the Medical Octopus. He states that the "first batch of appointments comprised the Editor-Manager-Boss of the A. M. A. and twelve of his official family," only one of whom had ever worn any uniform save the "collar" of the A. M. A., and that every local officer of the A. M. A. is now in the Chicago branch. He objects to the nominal nature of the examination and the exemption from state board examinations, in case of removal to another state. Otherwise expressed, this Corps is made up of prominent medical men, interested in professional matters; the Government recognizes their

high professional standing, as a substitute for the formal examination necessary and proper in appointing young men to permanent salaried positions; and gives in return for their services, a privilege which very few are likely ever to use.

PRIVATE DUTY NURSING. Katharine DeWitt, R. N., Assistant Editor of the *American Journal of Nursing*; J. B. Lippincott Co., Philadelphia; 244 pages, \$1.50.

This book deals both with practical matters and considerations of ethics, deportment, business interests, etc. It contains much useful advice and is worthy of the attention, not only of nurses, but of physicians.

EPIDEMIC CEREBRO-SPINAL MENINGITIS. Abraham Sophian, M. D., Kansas City; C. V. Mosby Publishing Co., St. Louis; 272 pages, illustrated; \$3.00.

This is stated to be the only monograph in the English language on this disease. Dr. Sophian's experience in the N. Y. Research Laboratory has fitted him to discuss the subject as an authority. Every phase of the subject from the history of the disease as an epidemic, first recognized in 1805, to vaccine therapy and prophylaxis is treated, is given. A table of about 3,300 cases treated by various physicians with vaccine is given, showing an average mortality of about 30% as contrasted with a general average of about 70% for other methods.

LES EPANCHEMENTS DU PERICARDE (Pericardial Effusions). Dr. Germain Blechmann, Paris; J. B. Balliere et Fils, Paris; 350 pages, illustrated; paper covers; price not stated.

Beside a critical review of diagnostic points, including X-rays, clinical manifestations, therapy, pathology and sequellae, special attention is given to the method of Epigastric Puncture of Marfan. This is a valuable work and very easily read by those who have even a slight acquaintance with French.

CLINICAL LABORATORY METHODS. Roger S. Morris, A. B., M. D., St. Louis; D. Appleton & Co., N. Y.; 340 pages, illustrated; \$3.00.

This is an excellent, condensed treatise, space being economized by sententious literary style rather than by omissions.

TRANSACTIONS OF THE FOURTEENTH ANNUAL MEETING OF THE GASTRO-ENTEROLOGICAL ASSOCIATION.

This is an assemblage of reprints in book form, with a list of members, constitution and by-laws. The meeting is the one at

Philadelphia in 1911. A considerable number of independent topics are covered and the matter is of the greatest value.

PROCEEDINGS OF THE ROYAL ACADEMY OF MEDICINE, Vol. 6, No. 5, March, 1913. Published by Longmans Green & Co., London; 7/6d.

This issue of the proceedings consists of a large paper-bound volume containing the general papers of a miscellaneous nature, arranged by sections, and a smaller supplement containing the first part of a symposium on Alimentary Toxaemia.

THE OPERATING ROOM AND THE PATIENT (Third Edition Rewritten and Enlarged), by Russell S. Fowler, M. D., Chief Surgeon First Division, German Hospital, Brooklyn, New York. Octavo volume of 611 pages with 212 illustrations; Philadelphia and London; W. B. Saunders Company, 1913; cloth; \$3.50 net.

While this book makes no pretensions to being a systematic treatise on surgery, the title suggests a much more modest field than is actually covered. The different kinds of operation are taken up in order and full directions for preparation of operating room and patient, for safeguarding the patient during and after operation, etc., are given in detail. Many hints as to diagnosis and choice of operation are also given and, indeed, there is scarcely any part of surgery on which light is not thrown.

INSURANCE MEDICINE. Being suggestions to Medical Examiners; Henry H. Schroeder, M. D., New York, Editor Insurance Department *Medical Record*. Wm. Wood & Co.; 150 pages; \$2.00.

This book is a reprint of the articles contributed by Dr. Schroeder to the *Medical Record* and discusses various problems of interest to the insurance examiner—and there are few physicians who do not hold or do not hope to hold positions of this nature. The author's experience as Director of the Mutual Life Insurance Co. amply qualifies him for the work. In passing, it is pertinent to remark that of late years the influence of life insurance companies not only in securing a more scientific and better enforced system of vital statistics but in educating the profession and the public along hygienic and sanitary lines, has been a very important factor.

ABSTRACTS.

CONGENITAL HYPERTROPHIC STENOSIS OF PYLORUS Dr James B. Eagleson, Seattle, Wash., *Northwest Medicine*, April, 1913, reviews the history and states that the mortality under medical treatment is 80-90 per cent. While the first description of the disease is usually attributed to Hirschsprung, twenty-five years

ago, Osler found a clear account by Hezekiah Beardsley, with description of necropsy, in Cases and Observations by the Medical Society of New Haven County, Conn., 1787. Fredet, in September, 1910, tabulated the surgical procedures and results, as follows:

Pylorectomies 1, mortality, 100 per cent.

Loreta divulsions 39, 15 deaths, 24 recoveries.

Pyloroplasties 26, 11 deaths, 15 recoveries.

Modified pyloroplasties 17, 3 deaths, 14 recoveries.



Fig. 1.—Five years after operation, showing food current passing through pylorus.

Gastro-enterostomies:

Not named 17, 10 deaths, 7 recoveries.

Anterior 20, 13 deaths, 7 recoveries.

Posterior 49, 21 deaths, 28 recoveries.

Of these various operations pylorectomy was early abandoned as useless in a benign tumor. The divulsion of Loreta gave a high percentage of recoveries but many relapsed and had to have a second operation. Several of the deaths were from hemorrhage and rupture of the duodenum. Pyloroplasty is a very difficult operation in pyloric hypertrophy, and, while it has given fairly good results in the hands of European, has never been in favor with American surgeons.



Fig. 2.—Four years and four months after operation, showing food current passing through anastomosis.

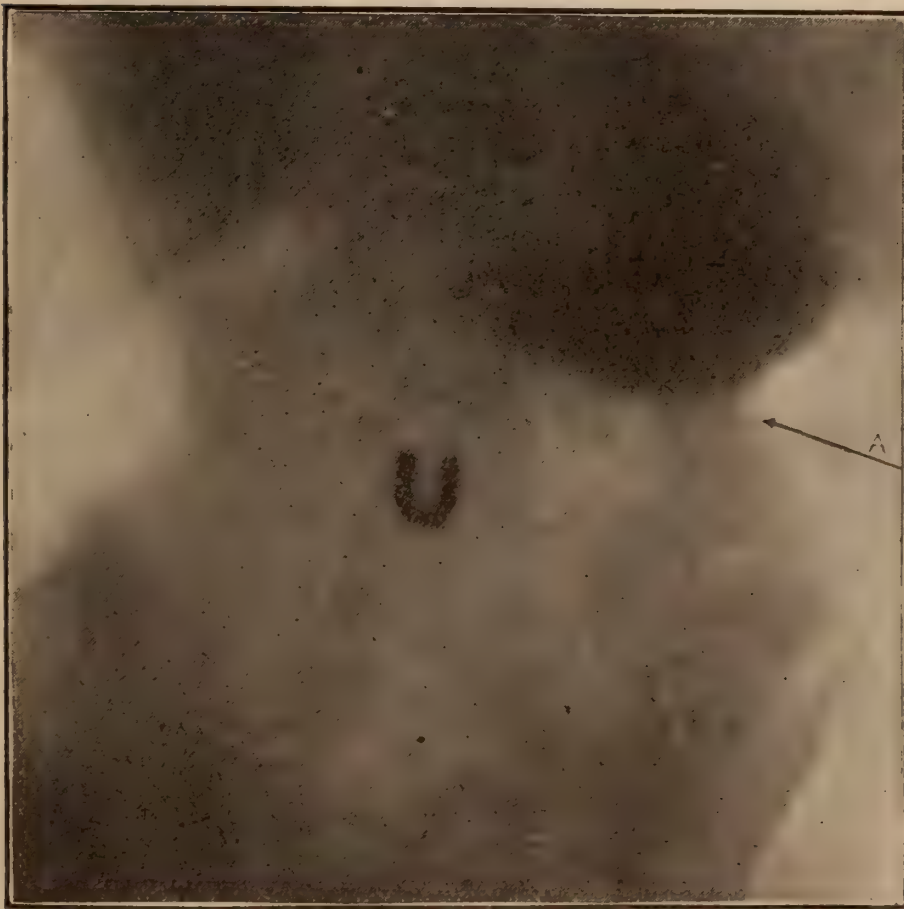


Fig. 3.—Four years after operation, showing food current passing through anastomosis.

The technic of posterior gastro-enterostomy has now been so carefully perfected and requires practically no longer time than any of the other operations, that it has become the operation of choice.

Dr. Eagleson reports three cases, all in male infants, treated by posterior gastro-enterostomy, successfully. Each of the illustrations shows the after result in these cases, respectively. The illustrations are reproduced through the courtesy of the author and the Editor of *Northwest Medicine*.

THE EVOLUTION OF THE CHEMICAL MATERIA MEDICA. The following notes were abstracted for the *Critic and Guide* by Martin I. Wilbert, Philadelphia, Pa., from a list published in the *Pharmaceutische Post*:

SUBSTANCES KNOWN TO THE ANCIENTS.

Sulphur; this substance is mentioned in the oldest scientific works.

Ammonium chloride; sal ammoniac was known to Herodotus, and it is said to have been discovered in the neighborhood of a temple dedicated to Jupiter Ammon, in Libya.

Realgar and sulphide of antimony.

Potassium carbonate; known to Dioscorides.

Sodium carbonate; supposed to be identical with potassium carbonate. Identified by Duhamel in 1736, and Marggraf, 1759.

Gypsum, lead carbonate, lead oxide, iron, ferrous sulphate, alum, zinc ores, zinc oxide, known as cadmia or pompholix, to the alchemists as "Lana philosophica," or, on account of its resemblance to snowflakes, "Nix alba."

Gold, silver, copper, as "Aes cypricum."

Cupric sulphate, known to the Greeks as chalcanthum, to the Romans as atramentum sutorium. More closely described by Basilius Valentinus. Directions for making were given by Van Helmont, 1644, and Glauber, 1648.

Mercury; known to Aristotle.

Vinegar, lead plaster, soap; the earliest descriptions are found in the works of Pliny.

Potassium bitartrate; in the crude state this was known to the Greeks and Romans, to the latter as "Fæx vini."

Oil of turpentine.

Sodium chloride.

SUBSTANCES INTRODUCED BY THE ARABIANS.

Potassium nitrate; called by Geber "sal petræ."

Acid, hydrochloric, in Aqua Regia. The purer article was known to Basilius Valentinus. Its production by distilling a

mixture of sodium chloride and sulphuric acid was described by Glauber, hence its name, "*Spiritus fumans Glauberi*."

Acid, nitric; known to Geber.

Arsenous acid, "white arsenic," known to Geber. More reliable data were not obtainable until the middle of the eleventh century.

Mercuric chloride; known to Geber, Rhazes, and also to Avicenna.

Mercuric oxide; known to Geber.

Silver nitrate; known to Geber, but was introduced into medicine by Angelus Sala during the seventeenth century, when it was known as "*Magisterium Argenti*," "*Crystalli Dianæ*."

Alcohol, dilute; stronger alcohol was first produced by Raymundus Lullus in the thirteenth century, who introduced it into the materia medica as "*ultima consilatio corporis humani*."

Lead acetate; although this was known to Geber, it was not introduced or used as a medicine until 1760, when Goulard produced what was later known as "*Aqua vegetomineralis Goulardi*."

Camphor; this was first brought to Europe about the middle of the sixth century.

Aqua ammoniae; was known to Geber, as was also a more or less pure caustic potash.

SUBSTANCES KNOWN TO, OR INTRODUCED BY, RAYMUNDUS LULLUS IN THE THIRTEENTH CENTURY.

Alcohol; stronger.

Ammonium carbonate; produced from urine.

White precipitate.

THE FIFTEENTH CENTURY CONTRIBUTED:

Potassium sulphate; this may have been known to Isaac Hollandus in the fourteenth century. Described by Oswald Croll, about 1608, as "*Specificum purgans Paracelsi*."

Sulphuric acid; the first known accurate description of this substance is attributed to Basilius Valentinus.

Zinc sulphate, "white vitrol"; known to Basilius Valentinus.

Ferric chloride, lead acetate, and the spirit of nitrous ether were all known to Basilius Valentinus.

THE SIXTEENTH AND SEVENTEENTH CENTURIES GAVE US:

Sulphuric ether; discovered by Valerius Cordus about 1540, and by him described as "*Oleum vitrioli dulce*"; this preparation appears to have been forgotten until rediscovered by Frobenius, a London apothecary, about 1730.

Mercurous chloride; known in Europe in the sixteenth century.

Oil of anise, oil of cloves; known to Valerius Cordus.

Benzoic acid; known about 1608.

Antimony and potassium tartrate; produced by Adriano Van Mynsicht, 1631.

Zinc chloride; mentioned by Glauber, 1648, as "*Oleum lapidis caliminaris*."

Sodium sulphate; known to Glauber, 1658.

Potassium permanganate; Glauber, in 1659, noted the peculiar color that was produced on fusing potassium nitrate with manganese dioxide. The composition of potassium permanganate was first described by Mitscherlich in 1830. The name "*Chamælon minerale*" was given to it by Scheele.

Ammonium acetate; was introduced by R. Minderer during the seventeenth century.

Phosphorus; discovered by Brand, in urine, about 1669. More carefully studied by Gahn, 1769, and by Scheele, 1771, who demonstrated its presence in bones.

Sodium borate; probably known at an earlier period, was reintroduced during the seventeenth century by the Venetians.

Potassium and sodium tartrate; introduced about 1682 by an apothecary, P. Seignette, of Rochelle, France.

Magnesium sulphate; discovered 1694, by Nehemiah Grew, in the water of a mineral spring at Epsom, England.

DURING THE EIGHTEENTH CENTURY THERE WERE INTRODUCED:

Magnesium carbonate; introduced as a secret remedy; "*Magnesia alba*," about the beginning of the eighteenth century. The method of preparing was described by Valentini, 1707, and Slevogt, 1709. The composition of "*Magnesia alba*" was demonstrated by Black, 1756.

Boric acid; produced by Homberg in 1702 by the decomposition of borax. Known as "*Sal sedativum Hombergi*."

Phosphoric acid; produced in 1746 by Marggraf.

Magnesium oxide; in 1755 by Black.

Ether, acetic; first produced by Lauragais, 1759. Method of producing improved on by Scheele in 1782.

Tartaric acid, by Scheele in 1768.

Chlorine; produced by Scheele in 1744, and first known as "*Dephlogisticated muriatic acid*."

Glycerin; discovered by Scheele in 1779 while preparing lead plaster. He called it "*The sweet principle of oils*."

Lactic acid; Scheele, 1780.

Citric acid; Scheele, 1784.

Gallic acid; Scheele, 1785.

Tannic acid; Berzelius.

Bismuth subnitrate; first used in medicine by L. Odier in 1786.

Sodium carbonate; first recognized as such by Duhamel, 1736.

Thymol; introduced about the middle of the eighteenth century.

OF THE MORE IMPORTANT DISCOVERIES OF THE NINETEENTH
CENTURY WE HAVE:

Morphine; discovered in 1804 by Sertürner, an apothecary's assistant, at Paderborn, Germany.

Potassium, sodium, boron, in 1807, and calcium in 1808; by Sir Humphrey Davy, by means of electrolysis.

Iodine; in 1811 by Courtois.

Naphthalin; by Garden in 1816.

Hydrogen dioxide; by Thenard in 1818.

Strychnine; by Pelletier and Caventou in 1818

Veratrine; by Meiszner in 1818.

Brucine; by Pelletier and Caventou in 1819.

Quinine, cinchonine, colchicine; by Pelletier and Caventou in 1820.

Caffeine; Runge, 1820, and independently also by Robiquet in 1821, and by Pelletier and Caventou.

Potassium Iodide; introduced into medicine by D. Coindet in 1821.

Potassium bromide; by Balard in 1826.

Bromine; discovered by Balard in Montpellier, France, in 1826.

Iodoform; produced by Serullus in 1822, but not introduced into the materia medica until about 1837.

Santonin; discovered in 1830, independently of each other, by two German apothecaries, Kahler in Düsseldorf, and Alms in Mecklenburg.

Atropine; isolated by Meins in 1831.

Codeine; by Robiquet in 1832.

Phenol; discovered by Runge, in coal tar, in 1834.

Salicylic acid; in 1839, Kolbe, in 1873, introduced it as an antiseptic.

Chloral hydrate; discovered in 1832 by Liebig. Was introduced as a medicine by Liebreich in 1869.

Chloroform; discovered by Liebig, and also by Soubeiran in 1831. Introduced into medicine by Simpson in 1847.

Theobromine; isolated from the seeds of *Theobroma cacao* in 1841 by Woskresensky.

Collodion; introduced in 1853 by Maynard and Bigelow.

Physostigmine; by Jobst and Hesse in 1864.

Resorcin; by Hlasiwetz in 1864.

Cocaine; isolated by Gædeke in 1864. Introduced into medicine in 1884 by Koller.

Formaldehyde; discovered by A. W. Hoffman in 1867.

Pilocarpine; Gerrard and Hardy in 1875.

Sodium salicylate; made synthetically by Kolb's process in 1875.

Napthol; 1881.

Apomorphine hydrochloride; used in 1882. The free base had been discovered in 1869 by Matthiessen and Wright.

Antipyrine; discovered by Knorr in 1884.

Acetanilid; discovered by Gerhard, has been in use since 1886.

Phenacetin, 1887. Saccharin, 1887. Sulfonal, discovered by Baumann in 1883. Trional; 1893.

FECAL FISTULA. By John B. Deaver, M. D., Sc.D., LL.D., *The Therapeutic Gazette*, March 15, 1913. The causes of fecal fistula in the first instance may be illustrated by the following tabulation of 100 cases:

FINDINGS AT ORIGINAL OPERATION.

73 cases of appendiceal abscess.

9 cases of acute appendicitis with peritonitis.

4 cases of salpingitis.

3 cases of strangulated hernia.

1 case of peritonitis, unknown origin.

1 case of fibroid uterus and chronic appendix.

2 cases of perforated cecum, one typhoidal.

1 case of fecal fistula.

1 case of perforated ileum, typhoidal.

1 case of gall-stones.

2 cases of ovarian cyst.

1 case of umbilical abscess.

1 case of perinephric abscess.

Tuberculosis, actinomycosis, or carcinoma of the intestines may also be the starting point of a fecal fistula.

ARTERIOSCLEROSIS. By James Third, M. D., *Can. Pract. and Rev.*, April, 1913. Bearing on this question the following statistics are cited from Ontario reports:

Total Deaths

For Year. Deaths, 50-60. 70 and Up.

Clergymen	61	11.5%	44.3%
Barristers	33	12 %	33.3%
Physicians	60	33.3%	21 %
Carpenters	308	18 %	31 %
Blacksmiths	112	18 %	40 %
Farmers	3,229	12 %	50 %

DIFFICULT FEEDING CASES IN INFANTS. Chas. Edgerton Carter, M. D., Salt Lake City, *N. W. Med.*, April, 1913.

1. If malodorous, stools are usually indicative of: (a) Excess proteid. (b) Need for entire food revision.

2. If green with mucus (often sour smelling), usually indicative of: (a) Too high sugar. (b) Too high fat.

3. If normal color with curds and history of colic: (a) Too high proteids. (b) Excess fat. (c) Faulty methods.

4. Irritative stools: (a) Too high sugar. (b) Lack of lime salts. (c) Excess of fat.

5. Hard dry stools: (a) Too high proteid. (b) Wrong kind of proteid. (c) Too low fat.

6. Blood: (a) Irritative. (b) Pathognomonic.

A few general rules underlying all abnormal cases may be of service and fit into our feeding suggestions at this point.

1. Orange juice as a laxative rarely agrees before fifth month and, to avoid fermentation, should always be given between feedings.

2. Starch digesting enzyme rarely is active until fourth month.

3. Lime water constipates and, retarding peristaltic activity, may produce intestinal gas.

4. Abdominal chilling or habitually cold feet may produce colic and retard digestion.

5. Live enzymes of breast milk or fresh cow's milk are superior to "dead" or canned feeding.

6. Six hours in open air daily is essential for satisfactory oxidization of artificial feedings.

7. Salt in small but constant quantities is necessary in all artificial formulae.

Breast milk shows a negligible variation in the sugar content. Six to seven per cent. is constant, no matter what the mother's age, temperament, condition or period of lactation, while fat and proteid percentages vary markedly, particularly the fat. These three facts afford an invaluable key to the solution of difficult feeding cases, viz:

1. Let the sugar percentages approximate normal as the non-fluctuating factor in the food equation.

2. Let the proteid percentages vary in strength and form to meet conditions, but decrease and adjust the fat percentages with freer latitude.

3. Lactose, and maltose-dextrin never disagree when needed in the systemic economy. Proteid properly adapted in kind rarely is responsible for the blame so commonly ascribed to even low

percentages, but fat with its propensity to ferment and cause colic needs careful supervision.

Czerny says "fat contained in milk is by far the most toxic ingredient." From that very conviction he elaborated the malt soup mixture. It is true that an increase in fat percentages raises the caloric total rapidly and for that reason appeals in certain marantic infants, but two practical deductions should be borne in mind:

1. That fat percentage increase in delicate children must be advanced with great caution up to normal, or the limit of tolerance.

2. We must practically double the amount of carbohydrates and proteids if we secure the same caloric values that a smaller quantity of fat contains.

To give the pith of such deductions in a sentence, young infants take high sugar values well, *e. g.*, malt, milk or cane sugar, while older infants require and will digest the higher proteids, such as gruel, malted, partially digested or plain.

TEST FOR HYPERCHLORHYDRIA. *La Tribune Medicale*. Cippolina claims when an aqueous solution of anilin is added to a solution containing HCl and a few drops of sodium hyperchlorite are added, the mixture assumes a color which varies with the intensity of the HCl. If it contains more than 2 per cent. of HCl a permanent amethyst color results. If the amount present exceeds $\frac{1}{4}$ per cent., a reddish-violet color changing to yellow appears; if less than $\frac{1}{4}$ per cent., a permanent dark violet color appears. By this means the hydrochloric acid of the gastric contents can be determined in a few minutes.

The test meal used by the author consists of 200 gm. of potato and 200 c.c. of white wine and water in the proportion of 1:2. A yellow reaction proves that hyperchlorhydria can be excluded. The same color is obtained with lactic acid, but only in 10 per cent. solutions.

A 10 per cent. solution of calcium hyperchlorite may be substituted for the sodium solution.

NOTE.—Probably hypochlorite is meant.

Information Wanted

In a case of DELIRIUM TREMENS, the vomitus was negative as to blood, peptone, sugar and HCl. The total acidity by phenophthalein was 15 degrees. The alizarin end-point was not reached at 120 degrees. Now, while the alizarin test is very inaccurate, it is of interest to have an explanation of the strange behavior at times.

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The Necessity For Accurate Pre-Operative Diagnosis and the Methods to Be Employed in Intra-Abdominal Lesions

HERMAN E. HAYD, M D., M.R.C S. (Eng.)

Buffalo

ACCURATE diagnosis for the proper treatment of any disease is of the greatest importance, and especially so when we are considering lesions which involve the abdominal organs, where operative undertakings, no matter how trivial, are often matters of the gravest responsibility, not only because life is in jeopardy, but because of the resulting adhesions, which are often consequent upon the opening of the peritoneal cavity. Again, if certain acute fulminating inflammations are not quickly and properly interpreted, a few hours' delay might be the cause of a fatal termination, no matter how carefully or how judiciously the necessary operation was conducted, or certain complications might result from delay in properly diagnosing the case so as to render a simple and comparatively safe surgical undertaking exceedingly dangerous and hazardous. There is practically no mortality incident to modern surgery when skillfully and scientifically executed, but post-operative adhesions, with all their painful and dangerous complications and consequences, their associated distress, future suffering and disability, make the conscientious surgeon hesitate in recommending operative procedures, unless a recognizable pathology of serious possibilities is present, or symptoms which render life miserable or seriously disturb the functions of one or more organs, either, because they are directly involved, or by reason of intimate reflex association.

I shall not attempt to discuss in this paper tonight the symptomatology of the many lesions which can exist in the abdominal

cavity, nor of the treatment and surgery which such diseased conditions call for, but only in a very general way develop a few of the important points which must be relied upon to establish a correct diagnosis, and incidentally to bring out a few of the strong and salient features which, when considered, are of inestimable value in building up a clinical picture, and, above all, to impress upon you, that in my experience time and patient study are the two requisites necessary to get this information. Errors in diagnosis are often made, but most frequently, not from want of knowledge on the part of the attending surgeon, but from carelessness and haste in arriving at conclusions.

First of all, a careful history must be taken, and it is easiest and best to listen patiently to all the person wishes to divest himself of, and then proceed to a physical examination, not only of the organ, but organs, which are in the main responsible for the symptoms the patient suffers from, as well as the body in general. The examination is usually best made with the patient lying on the back, and the examiner's hands should be warm and the sufferer should be made as comfortable as possible. First, the upper abdomen should be carefully palpated, and any points of undue prominence must be noted and areas of pain or tenderness or resistance or fluctuation. The hand should be pressed deeply into the right and left flanks, and the kidney carefully palpated. The edge of the liver should be felt for, and its area percussed for lessened or increased dullness. The stomach should be outlined, when such a course is thought necessary, by giving the patient a teaspoonful of bicarbonate of soda in a glass of water, and follow this immediately by a teaspoonful of tartaric acid dissolved in a like amount of water, or the organ may be distended by air from a Davidson syringe. The colon and vermiform appendix are then palpated, and the sigmoid flexure and colon examined for faecal accumulations and growths, and then a careful vaginal examination should be made by touch and inspection. The color of the vagina should be observed, and the presence of discharge, or other evidences of irritation about the labia or clitoris should be looked for. Changes in the position of the uterus and peculiarities of form, size and consistence of the organ should be studied, and alterations in sensibility recognized, and inflammatory masses or adventitious growths felt for—Kelly. The pelvic organs and rectum should be examined by the index finger or two fingers, to note every possible deviation from health, and supplemented by a careful bi-manual examination. Often the patient should be placed in the knee-elbow position, and with instruments of precision the bladder and rectum should be carefully inspected under electric

illumination, or by the head glass with reflected light; in fact, everything known to modern medicine and surgery should be employed to get as perfect a clinical picture as is possible. Pain is, perhaps, the most important symptom which causes a sufferer to seek relief, and it may be the result of some existing inflammatory condition in one of the abdominal viscera, or it may be due to some peripheral irritation, or be dependent upon some systemic infection or constitutional dyscrasia as gout, lithaemia, malaria, plumbism and certain anaemias. Dyspeptic phenomena, loss of appetite, distress after eating, pain and even excruciating agony, such as is seen in lead colic, bowel disturbances, loss of general nutrition and strength are symptoms common to many intra-abdominal diseases, and they may also be simply expressions of some irritative condition altogether outside of the peritoneal cavity, as the gastric crises of locomotor ataxia, and thus their causes must be carefully studied lest grave mistakes result from various operative undertakings, which would, perhaps, be justifiable where the symptoms clearly dependent upon an intra-abdominal lesion.

Acute conditions, such as gastric and duodenal perforations, acute gangrene with perforation of the gall bladder, acute gangrenous appendicitis, acute pancreatitis, acute thrombosis of the mesentery, typhoid perforation, and extra-uterine pregnancy, in fact, rupture of any of the viscera, are among the catastrophies which call for immediate and heroic surgery, and mistakes in diagnosis will of necessity be frequent, because such conditions cannot be leisurely studied, nor can time be given in order to obtain the valuable assistance which comes from a careful physical examination of the patient, as well as the added information which can be gotten from thoroughly scientific chemical and laboratory findings, and then, above all, the patient is so desperately ill and so full of pain and suffering that a satisfactory physical examination is impossible. It is, however, in this cataclysmic class of cases where the history of the attack is of the greatest importance, and upon it a diagnosis can often be made, and the great triumphs of modern surgery accomplished. In the elucidation and differentiation of the more common intra-abdominal maladies, especially where there is a history of chronicity, the value of the anamnesis cannot be over-estimated, and perhaps nowhere is this more strikingly illustrated than in gastric and duodenal ulcer, cholelithiasis and appendicitis, diseases which have so many common symptoms and yet certain characteristic signs, which are peculiarly their own. In all, there is a history of stomach distress, perhaps pain, of previous dyspepsia, fullness and weight after eating, eructations of gas,

belching and sour stomach, loss of weight and general physical strength.

Pain is the significant landmark, and with ulcer, peptic or duodenal, it is peculiar in that it comes on after eating in from two to five hours, according to the situation of the ulcer. It is circumscribed to the region of the navel. At first it may be complained of only after a hearty meal, or after one meal, and then it becomes evident after each meal. It may persist for days, or even months and years, and then comes a period of quiescence; in fact, this cycle of alternating attack and interval of relief is peculiarly and forcibly the history of ulcer, and remains so unless the ulcer is permanently healed or makes for itself adhesions to other structures, when a symptom complex is added, due to the new involvement and perhaps malignancy. The pain of cholecystitis differs from ulcer in that it is sudden and severe. It has a wider field of radiation. It comes with no regularity as to time. It is rarely caused by food, and it is rarely eased by it. Nor does the patient trace his distress to it. The pain is not gnawing, boring and burning in character, as in ulcer, nor is it relieved by food, hot drinks or alkalines, as in ulcer; nor by vomiting or irrigation which relieves the acid-offending materials of ulcer—Graham. The direction of the pain is a matter of great diagnostic importance and value. The pain of ulcer of the stomach does not radiate. It is central and in the pit of the stomach, while that of gallstones extends over a larger surface and radiates even to the right or left shoulder blade. The pain of nephritic stone runs down the sides following the course of the ureter into the testicle and head of the penis, while that of appendicitis, which although at first is epigastric, soon locates itself in the lower right quadrant and then often extends down the anterior part of the leg, following the course of the anterior crural nerve and its branches. Then, too, the manner in which the subsequent symptoms follow the initial pain is so clear-cut and incisive that a diagnosis can be made with almost unerring certainty. For example, in acute appendicitis, pain is first, often acute and lancinating, then nausea and vomiting, local sensitiveness and spasm of muscle, elevation of temperature and an increase in the number of leukocytes—and this is the uniform order of their appearance. These facts are especially important in differentiating acute appendicitis from lobar pneumonia and diaphragmatic pleurisy, where pain follows the fever and other symptoms of constitutional disturbance. However, in children mistakes in diagnosis are not uncommon, and all of us have perhaps more than once opened the belly in a child and found the appendix normal, and on the following.

day found the symptoms and signs of a well-marked pneumonia. Of course, the value of the anamnesis depends to some extent upon the degree of intelligence of the patient, who is being investigated, but I am sure more often upon the patience and tact of the man who is doing the investigating. Leading questions must not be asked, and children and nervous persons must be quietly and kindly dealt with, and it is often surprising to see what valuable information they give and here and there suggest a sign or symptom which the astute surgeon can follow up and elaborate, and thus complete a diagnosis. Unfortunately, all of the inflammatory diseases of the upper right quadrant become complicated by associated adhesions and extensions, and then a differential diagnosis often can only be made by an exploratory laparotomy, and then the surety of relief must be left to comprehensive surgery.

Next in importance to careful history-making is the physical examination of the patient. Nature in her effort to protect herself produces spasm of muscle, and, therefore, all inflammatory lesions have pain upon pressure and fixity and rigidity of muscle over the part involved. This pain and tenderness may be very acute, and especially so where the trouble is not too deep-seated. Sometimes, owing to great nervous susceptibility and inability of the patient to relax, an anesthetic must be administered or a hot bath to make the examination sufficiently complete and thorough, and this is especially so for certain pelvic conditions where long, fragile adhesions are present which permit considerable motility and movability of the organs, but yet excursions not great enough to enable them to normally perform their functions, or adhesions and contractures of tissue and structures may exist which are not gross enough to palpate through a tense and rigid vaginal vault. Because the difficulties in diagnosis in abdominal diseases are so great—in fact, sometimes impossible—every resource of value must be at hand to assist us in solving these complex problems. Dr. Robert T. Morris of New York has given us some valuable suggestions in a paper published in the January 25, 1908, number of the Journal of the American Medical Association, and when carefully studied and applied often help to clear up an otherwise obscure case. He has noted that the lumbar ganglia of the sympathetic get sensitive under certain irritative and inflammatory influences, and this tenderness is reflected forwards to a point on each side of the navel. He says: "Draw a line from the right anterior superior spine of the ilium to the navel. On this line, an inch and one-half from the anterior superior spine we find McBurney's point. Tenderness on deep pressure at this point gives presump-

tive evidence of an irritative process in the vicinity of the vermiform appendix, but tenderness on superficial pressure at this point may mean irritation of sensory nerves of the abdominal wall, and this irritation may be due to causes ranging from hysteria to toxemia. If we come out on this line one and one-half inches from the navel, we get a point of definite diagnostic value, and, according to Morris—in any pelvic disease, whether tubal or ovarian, in old scars in the cervix, metritis, endometritis, piles or bladder inflammations, there will be tenderness over this point on both sides one and one-half inches from the navel.

If the appendix alone is involved, then the tender point is only on the right side. He also says that involuting appendices and those in which the organ is only congested, as from a prolapsed kidney, there will always be seen more or less marked tenderness over this Morris point, while the McBurney point may show no tenderness, even on deep pressure. When the kidneys or gall bladder are affected, there is no point of tenderness over either lumbar ganglia. Sometimes these points of tenderness are matters of great importance in eliminating the causes of many intra-abdominal symptoms when they are due to peripheral irritations, as certain eye reflexes and phorias, which often occasion all kinds of dyspeptic phenomena. Then, too, they are of value when considering the reflex dyspepsias which are seen in so-called uncomplicated retroverted uteri or prolapsed ovaries, or to the painful and tender old scars often noted in healed cervical lacerations.

I have studied these Morris points of pain and tenderness for a number of years, and although I am not prepared to go as far as he does in their constant presence with these pelvic and appendicial lesions, still I have met them often enough to consider their presence as valuable diagnostic aids, and in connection with all the other many signs and symptoms of diseased conditions they simply accentuate the axiom—that to be of value they must be intelligently interpreted—because accurate diagnosis means correct observation and logical deductions.

The Murphy five diagnostic methods for examination of patients are also of great value:

First, the fist percussion of the kidney, which is used to determine the presence or absence of an acute pathological condition within that organ. The patient with clothing removed above the waist is seated in an upright position on a stool, and is then instructed to bend forward as far as possible, and while in this position the examiner's left hand is pressed firmly upon the back, and the right clenched hand is brought down with considerable force upon the dorsum of the left hand, when the patient

will cry out with pain if there be an acute infection, infarction or retention in the pelvis of the kidney or stone or ureteral obstruction, because any organ under tension will make pain when suddenly struck.

His second method is used in acute infections of the gall bladder or acute obstruction of the cystic or common duct, with or without infection. The examiner sitting at the right side of the recumbent patient presses his left finger deeply under the costal arch at the tip of the ninth cartilage. The patient is then asked to take a deep inspiration, which forces the gall bladder below the costal guard or border, and when the flexed finger is suddenly struck with the ulnar side of the right hand, great pain is provoked. This he calls his hammer stroke percussion. The third method—which is used also for gall bladder examinations—is called the deep grip palpation, which is simply squeezing the tender gall bladder up against the diaphragm as it descends with each inspiratory effort. A fourth is the piano percussion to demonstrate small quantities of fluid and exudate in the abdominal cavity, and is simply tapping the abdominal wall with the tips of the four fingers, one after the other, commencing with the index finger; and a fifth method—the simultaneous palpation of both iliac fossa for suspected acute appendicial involvement.

Intra peritoneal conditions often manifest themselves in swellings and growths, and these masses may be painful and tender, or without any special sensibility. They may be movable or fixed, and in some cases they wander about the abdominal cavity swinging upon their stretched-out pedicles. They can in most cases be felt by careful palpation, if the patient be placed in various positions which relax superimposed organs or tense muscles. In thin subjects their outline can be carefully and thoroughly studied, but if the person be very fat, often this physical disproportion makes a careful examination impossible. A very important and possible complication may cause some difficulty, as when a displaced organ, as a kidney or uterus or ovary, becomes fixed in its altered position and then can easily be mistaken for some adventitious growth or a neoplasm—benign or malignant—or a hard growth lying over a large blood vessel may have such increased visible pulsation as to be easily mistaken for an aneurism. In dealing with a swelling in the abdominal cavity, the bowels should be thoroughly unloaded, and the bladder should be emptied, because many errors of diagnosis have resulted from this want of care on the part of the examining surgeon. Phantom tumors must be thought of, and their presence can be easily demonstrated by their disap-

pearance under an anaesthetic. Inspection of the abdomen, when done systematically, opens up a vista of possibilities. Peristaltic waves may be seen coming up to a point and increasing with visible intensity and culminating in crises of pain as in volvulus and bowel obstruction. Swellings in certain regions which commenced on one side or were first observed by the patient in the median line help in differentiating uterine and ovarian tumors, and even hydro-nephroses and occasional, although rare, echinococcic cysts of the liver.

Laboratory methods as employed by every capable and scientific surgeon are, of course, of great value, but often their importance is exaggerated, and, in my judgment, should only be relied upon when the other clinical symptoms accord with the findings. Increased leucocytosis and a great disproportion between the cell elements of the blood and high polymorphia percentages, iodophilia are of immense value in making a quick decision for operation, and especially when we are dealing with appendicitis, a disease which is responsible for over sixty per cent. of the acute inflammations of the abdominal cavity, and one which should be practically without mortality if medical men would look upon it as a grave surgical malady from its incidence. I believe that a great many deaths in this terrible disease can be traced to the delay consequent upon medical men in trying to make the diagnosis of the danger point by blood counts and other physical and clinical symptoms. After years of patient study and a large experience in dealing with this treacherous malady, I am of the opinion that surgery should be at once resorted to in every frank case of acute appendicitis, and that sudden pain in the lower right quadrant, perhaps extending to the pit of the stomach, vomiting, with fever and rigidity of the rectus muscle establishes a diagnosis with such certainty that laboratory examinations of the blood are unnecessary, and that they lead to delay and uncertainty in the only possible treatment, which should be prompt and efficient surgery.

In a more complicated condition, as when an appendicitis becomes engrafted upon a pelvic inflammation, when, for example, the patient is a woman who has been in bed for a week or more with peritonitis from tubal or ovarian involvement, or in a woman who has previously suffered from a pelvic inflammation, with masses which fill both lateral vaginal vaults, a blood count is of the greatest importance, and gives the surgeon a great sense of comfort and security. Here a sudden accession of pain in the right side, with increased leucocytosis and a high percentage of polymorphia nuclear cells, makes an operation imperative, because the pathological condition has changed and

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there has been added an acute appendicitis, perhaps by extension, and with it the dangers of rupture and a rapidly spreading fatal peritonitis, a complication which is not imminent in the course of simple tubal and ovarian pathology.

Appendicitis should always be operated early, because one cannot tell which attack or which person will develop pus, and so strongly does Murphy feel on this question, that I shall quote him from his August, 1912, *Surgical Clinics*. He says "that every case of appendicitis that is operated in which pus is found outside of the appendix at the time of operation has, in the presence of that pus, irrefutable evidence that the case was badly managed up to that time."

Laboratory examinations and chemical tests of the gastric contents are also of some value, but I am satisfied that many cases of ulcer of the stomach and duodenum have gone into an unoperable stage by delay, in trusting too much to simple chemistry, and that cancer—over fifty per cent—Mayo—so frequently engrafted upon old ulcer areas, has progressed beyond curative operative limits by diet, tentative and medical treatment, and often under the conservative counsels of the distinguished gastrologists. An absence of free HCl and an increase in the amount of lactic acid and the presence of the Boaz baccilli is only presumptive evidence of cancer, and so an increase in free HCl and high combined acids may exist, and yet the case be one of old ulcer, and upon a certain part of it cancer has been engrafted. Therefore, these useful and scientific methods of examination must carry with them the weight of conviction only when the clinical picture coincides with their possible sequences.

Microscopical examinations of the urine are of the greatest importance, and in a certain class of cases they establish the diagnosis. In ureteral inflammations and pyelitis, clumping of pus cells and the recognition of epithelial shedding from the pelvis of the kidney often clears up the cause of certain obscure septic symptoms. Cystoscopic examinations of the bladder and ureteral catheterization are also of great value, and particularly if we believe, as Kelly does, that over sixty per cent. of those cases of ill-defined right-sided pain are due to some trouble in the kidney, and usually a displacement, with a kinking of the ureter and retention of urine in the renal pelvis. Backache, which is also a common symptom in women, Kelly says, is more often due to anaemia and neurasthenia than to uterine and pelvic diseases. However, a retroverted uterus, with its associated endometritis, or a large and tender tube or ovary, varicosities of the broad ligament, or a tender, deflected cocyx, or a painful fis-

sure of the rectum, or ulcer or piles must be looked upon as very common causes of backache and prolonged ill health in women; and varicocele, painful, tender and hyper-aesthetic areas in the male urether, strictures of large calibre often cause very distressing backache in men.

The presence of albumen and casts in surgical cases must not be treated too lightly, nor should their presence be taken too seriously, and especially so when the spigmomanometer shows no increased blood pressure. High blood pressure readings, with the discharge of large amounts of urine, or even with diminished secretion of urine, with perhaps only a trace of albumen, are of infinitely greater importance in establishing the surgical risk of any operative case.

Blood in the stools is of great value. In making a diagnosis in obscure abdominal conditions the presence of macroscopic or microscopic blood may be confirmatory in a suspected condition of hemorrhage into the gastro-intestinal tract. The history of tarry stools, accompanied by symptoms of gastric or duodenal disturbance, may be enough to establish a diagnosis of a gastric or duodenal ulcer. A passage of bright blood would point to ulceration lower down. The chemical test for blood in the stools, the so-called "occult blood" would have no value unless proper precautions were taken to place the patient upon a diet devoid of blood pigments. Blood upon the outside of perfectly formed stools comes from the rectum or anus. If evenly distributed through the feces and of a brown or black color, the blood undoubtedly comes from the small intestines. However, when weighing the evidence of the examination of blood in the feces, considerable care must be exercised in excluding blood in the gastro-intestinal tract from other sources, as the mouth, nose, throat and lungs. And equal care must also be taken in the prevention of any admixture of blood from the vagina during a normal defecation.

The X-ray is also a valuable means in diagnosing intra-abdominal lesions. In the control of fractures and dislocations the ray has attained its highest degree of perfection, and certainly no surgeon to-day thinks of caring for a fracture or dislocation without its aid, and it is a question whether he would not lay himself open to a charge of negligence if he essayed to practice surgery without it. In urological conditions it vies with the cystoscope in brilliantly illuminating the kidney, ureter and bladder, so that stones, malignant growths and even ureteral kinks can be detected. We can also examine the soft structures with precision and with carefully applied Bismuth tests. Visceral ptoses and intestinal twists can be mapped out; pyloric growths,

stenosis and adhesions can often be satisfactorily delineated, and by its scientific use and correct interpretation, hysteria and functional diseases and other causes of ill-health and suffering have often been eliminated because of a definite and easily seen pathology present to account for the symptoms. However, one must not forget that even the X-ray has its limitations, and that grave errors can be made in demanding from the radiologist what the skiagraph, the fluoroscope and even the photograph cannot reveal, owing to the transparent and translucent character of the products of irritation. Indeed, certain kinds of gall stones, and even nephritic stones, are not dense enough to show a shadow, and shadows are often made by other conditions which even the skilled radiologist cannot explain, and thus great care and often much experience is required in properly interpreting even very excellent plates, and many must be made from different angles to get at different conditions.

The various tuberculin tests and reactions must be made, as well as the Wasserman, and above all these tests and valuable aids in diagnosis must be considered with common sense and judgment.

Many surgical errors are committed every day by well-qualified and scientific men who have a superabundance of theory and laboratory knowledge, but they lack the practical application of a few good surgical principles—in fact, they need a little horse sense. Much worse, however, is the position of some, so-called surgeons, ignorant, selfish and unscrupulous men, whose lack of knowledge and shameful paucity of every qualification which is necessary to equip one to be a surgeon and a diagnostician to properly discharge the serious responsibilities of his calling. He may be able to cut well, and he may know the technique of aseptic surgery so that his mortality, even in grave surgical undertakings, may be surprisingly low, yet I believe that I am voicing the sentiments of all of you when I say that it is he who is responsible for most of the unnecessary and mutilating operations which a long-suffering and abused public is justly and righteously rebuking today.

493 Delaware Ave., Buffalo, N. Y.

ABSORPTION OF FAT-LIKE SUBSTANCES OTHER THAN FATS.
W. R. Bloor of St. Louis, *Interstate Med. Jour.*, March, 1913, mixed vaseline, liquid petrolatum and lanolin with absorbable fats and found that 90% or more could be recovered in the feces, and that, in other experiments, none was found in the chyle. He therefore corroborates the prevalent opinion that they are not absorbed and have no value as nutrients.

The Sins of the Father.*

BY J. HENRY DOWD, M.D.

Genito-Urinary Surgeon Sisters', Mercy and Contagious Hospitals
Originator of The Dowd Phosphatometer

AT least 99 per cent. of the laity, and a goodly proportion of members of the medical profession, still believe "that the sins of the father," which they interpret to be syphilis and the venereal diseases, "are visited unto the children of the third and fourth generation."

Most careful investigation has been made along lines of this belief and all have arrived at the same conclusion—syphilis, which is the only constitutional disease that can be transmitted as such, never has been positively found to pass the second generation. The same may be said regarding gonorrhea and chancroids, which are looked upon as constituting sins of the father.

Let us go a step farther and assume that tuberculosis may be contracted through abuse of health, and thus be considered a sin of the father, being carried to his children's children, but this we know as next to impossible.

It may therefore be stated quite positively that the blood is in no way a carrier of contagion, or sins of the father, beyond the second generation, and even to the second generation is rarer than is naturally supposed.

One thing is almost a positive fact—in practically almost every case the mother must be syphilitic to produce a syphilitic child.

Syphilis is more rare in women than men. Why? Only the lymph and blood are carriers of the spirocheta. When a man has the initial lesion, patches covered with lymph or abrasions of any kind where blood and lymph are present, he is careful lest he infect another. In the absence of the above there being little or no danger, the female is spared to a great extent.

But let the female become infected, especially in the early stages, and conception take place, is not the almost invariable result abortion; is not this nature's way of protecting the human race from degeneration?

What then are the sins of the father? In speaking of the father, the mother must be included, for is she not a party to the act, carrying the foetus and rearing it to child and manhood?

This question may be answered in one word, taints or traits, which may include anything which enters into the daily life of the human being.

Knowing such to be positive facts, we are face to face with the new science—eugenics—the science for the betterment of the human race, and I might add, their only salvation.

* Read before the Gross Medical Club at Alden, N. Y.

Since time immemorial this science has been applied to domestic animals, by human aid; and in wild state by instinct, or an unseen aid.

But when we come to the human species, the future is allowed to take care of itself; thus we find our asylums full of insane, idiots, inebriates; our prisons full of criminals; tuberculosis and cancer ravaging the race (in practically every case of cancer or tuberculosis it is possible to find a family history of those diseases; they are not transmitted as such, but by a weakened strain); our sanitariums full of neurotics, and homes unhappy, far more than the average person suspects, many of them ending in the divorce court, and all because little or no attention was paid to ancestral stock. "It was a case of love at first sight." How many of these have ended well, have produced children that have been an honor to their parents and humanity. Far be it from me to guess, but the great majority have been ended in the courts of our land. And the future will take care of itself in exactly the way the Bible says, for "like will produce like," and continue to do so, excepting under one consideration: an offspring will partake of characteristics of both parents; thus if we have a pronounced maternal neurasthenic with a father of an exactly opposite type, the child will be what might be termed a halfbreed; although having well pronounced motherly traits, it will partake of the father's sufficiently to raise it far from the mother's condition. (This is simply the Mendelian trait, or theory.)

Other characteristics on the part of the parents must be viewed in a similar manner to that of neurasthenia.

Let us suppose that both parents are above criticism, as far as their family history can show, yet their offspring goes wrong, becomes a drunkard, burglar, murderer, prostitute, develops neuroses or other condition not conducive to good citizenship.

This is easily explained. There are two ways of attaining a fortune, it may be inherited or acquired; there are two ways of possessing characteristics, inherited or acquired.

There can be no denying the fact, a child may be born of parents of unquestionable parental or ancestral taints, but if the child from a babe is reared in a vicious environment it will undoubtedly acquire the viciousness of its surroundings.

Still another example may be stated. Both parental and ancestral history may be as near perfect as it is possible to attain, but the father had gonorrhea when a young man. Gonorrhea is a mixed infection due to gonococci, staph. and streptococci. Of these bacteria the first is known to perish, in 98 per cent. of cases,

inside of ten weeks, but they leave behind their allies, and usually deeply buried in the prostatic sinuses, from which they do not make their appearance excepting at the time of coitus. The young man has had no discharge for some time, even the urine, macroscopically, is clear; he marries. Sooner or later the young wife complains of pains, profuse menses, leucorrhea, etc., and an examination reveals a diseased ovary (strepto. or staphylococci can do as much damage to an ovary as to an appendix); it must come out.

The pain has more or less racked the nervous system, the removed ovary has added its share, and a neurasthenic has been produced. Later on a child is born. What is it? A neurotic, of course, to a degree according to the condition of the father, who due to the fast life now necessary in its reach for riches may have become a neurotic also. It is at this point it may be admitted that the sin of the father has been visited.

Before offering too adverse criticism regarding eugenics with the statement that sons of clergymen, and even their daughters, have been known to turn out vicious, listen. Do not judge men, or even women, as being perfect from the clothes they wear or the position they occupy. I have personal knowledge of one clergyman with syphilis, two with gonorrhea, several drunkards (all quietly, of course), and some neurasthenics whose children have never seen a well day. It is obvious to remark that the man or woman who poses as angelic, yet quietly commits known sins, cannot help but transmit their taint to the offspring.

In conclusion it may be said the world can be made practically perfect, but it will take a few centuries, and none of us will see it, but a start can be made now; it must be in the choice of life partners for your sons or daughters.

Forget pretty dresses, pretty faces, social standing, good salary, neat dresser, popular club or college man; look to family history, not the immediate family, but as Henry Ward Beecher has said, "the grandparents."

If this is done and family history of cancer, tuberculosis, criminality, drunkenness, fast living (sporting lives), marked neurotic conditions as insanity, epilepsy, St. Vitus dance, vicious tempers and even hysteria and pronounced neurasthenia be taken into consideration, and eliminated from both sides, in 100 years a race will have come forth that we can be proud of.

Again I say, "like begets like." Eugenics is the salvation of the human race.

40 North Pearl Street.

Alumni Association Medical Department of the University of Buffalo

The thirty-eighth annual meeting took place May 27-30. The first day (Tuesday) was given up to registration and the afternoon and evening to class reunions. The class of 1873, in charge of Dr. William H. Slacer, held its dinner at the Roanoke Hotel. Dr. Charles G. Stockton entertained his classmates of '78 at the Saturn Club. The class of 1883 had an auto ride in the afternoon, a dinner at the Buffalo Club, followed by a theater party at the Teck Theater. Classes of '93, 1903 and 1908 held their respective class dinners at the Hotel Statler, while the class of '98 dined at the Castle Inn, the arrangements being made by Irving R. Johnson. The dinners were well attended and there was a marked expression of loyalty to the University in the toasts rendered.

SCIENTIFIC PROGRAM.

The scientific feature of the program consisted of papers given on the morning and afternoon of Wednesday and Thursday. The contributions were all of a high class scientific character, and were listened to with much interest by the alumni present. On Wednesday morning Doctor Frederick H. Pratt, the newly elected Professor of Physiology, gave a paper entitled "The Effects of Carbon Dioxide on the Respiratory Center," which was followed by a demonstration in the Physiological Laboratory at 12.30.

Dr. Pratt's paper was introductory to a demonstration of the aero-plethysmograph, which took place at noon in the laboratory, together with a demonstration of various methods of laboratory teaching. The preliminary remarks were devoted to a statement of the problem basic to the theory of ventilation—the question as to the importance of the chemical purity of the air as contrasted with that of humidity and temperature conditions. He explained the difference in result following immersing of the body in respiratory products, pure air being breathed, and that following breathing of respired air, the body immersed in pure air. These two conditions were pointed out as the main divisions of this important problem.

The demonstration later showed how markedly the chemical purity of the respired air might diminish without any of the supposedly toxic conditions accompanying such procedure. With the aero-plethysmograph the subject was able to rebreathe his own alveolar air until stimulation of the respiratory center doubled the depth of respiration—a condition wholly beyond

comparison with that in the worst ventilated room. The air may cease to support combustion long before sensations of discomfort are felt, provided the skin surface is bathed in freely moving air of low humidity. The marked influence of the heightened carbon dioxide tension on the respiratory center, and experiments testing reflex efficiency under such conditions were explained.

Students' laboratory notes were on exhibition, and demonstrations by first year students were carried on under the head of "A New Method of Teaching Heat Regulation," and "Blood Pressure Changes Under Vagus and Depressor Stimulation." These demonstrations were intended as typical examples of the laboratory teaching methods now adopted in the school—the student learning through his own performance of experimental work.

The second paper, entitled "The Problem of Selective Action" (some laboratory methods in Pharmacology), was given by Dr. John L. Butsch, who came to us last year to take charge of the Department of Pharmacology. This paper was more fully amplified in the laboratory demonstrations given by Professor Butsch, assisted by his students, on Thursday noon. There were four tables arranged to demonstrate the methods of teaching used during the past year to show the action of drugs in the regular course for students. On table No. 1 there was a demonstration of the general protoplasmic poisons on cells—the types of drugs used were quinine, strychnine and cocaine. The cells used for demonstrative purposes were yeast cells and the paramecium. The yeast cells were suspended in a 5 per cent. glucose solution mixed with the proper concentration of the drugs, then placed in a Smith Fermentation tube and kept at the body temperature (37° centigrade) for half an hour, and the retardation of fermentation noted. A hanging drop was made of the paramecium and a drop of each blood in solution mixed with it on a separate slide. The action of the drug on the single celled organism was then carefully watched through the microscope.

On table No. 2 an animal was arranged for circulatory and respiratory observations, to show the relative efficiency of the various methods of drug administration, also the action of drugs on the circulatory and respiratory systems. The graded effects upon the height of blood pressure in the carotid artery was shown by using adrenalin in $\frac{1}{4}$ c.c. doses—the least effect being obtained from the subcutaneous injection, more by the intramuscular and the greatest effect by the intravenous method. The effect of administering drugs by inhalation was in the first instance shown by ether narcosis and secondly the vascular effects

produced by amyl nitrite. Later the action of digitalis on a circulatory apparatus was demonstrated. The toxic action of carbolic acid after absorption and the rapidity of the restoration of the animal to normal condition with the intravenous injection of 2 per cent. solution of sodium sulphate was then shown.

On table No. 3 there was a demonstration of stimulation and depression, the action of poisons, the treatment of poisons, the method of locating the exact point of the action of a drug on the neuro-muscular apparatus, racial idiosyncrasy, physiological antidotes and chemical antidotes.

On table No. 4 there was a demonstration of the method of perfusion of a cold-blooded heart and the ion action of potassium, sodium and calcium. Also the therapeutic and toxic action of digitalis on cardiac muscle. Other demonstrations comprised the action of drugs in the blood, the action of locally acting emetics and centrally acting emetics. Defibrinated beef blood was used and a demonstration of the action of carbon monoxide, potassium chlorate, potassium ferrocyanide, sodium nitrite by means of spectroscopy.

Dr. Robert P. Kennedy, Instructor in Chemistry, gave a short talk followed by demonstration on Chemotaxis, showing how an extra molecule of arsenic could be inserted in a drug.

To the members of our Alumni Association these papers and demonstrations were of particular interest as it showed the value of the laboratory method in teaching medicine and also the splendid selection of such competent teachers as Professors Pratt and Butsch in their respective departments.

Dr. G. H. A. Clowes, Biological Chemist of the New York State Institute for Malignant Diseases, then gave a paper on "Treatment of Hay Fever by Means of a Vaccine Derived From Pollen."

After a luncheon in the College Library, Dr. Wm. House, '95, Professor of Medical Jurisprudence and Assistant Professor of Neurology, Medical Department, University of Oregon, Portland, Oregon, one of our prominent alumni from the west, gave an interesting address on "Apoplexy in Relation to Blood Pressure." He was followed by Dr. Hugh C. McDowell, 1911, who gave an interesting talk on "Medicine in Mexico," the doctor having spent a year there in practice.

Thursday, May 29th, was essentially our big day. We had with us two such noted masters in medicine as Professor Howard A. Kelly of Johns Hopkins Medical School and Richard C. Cabot of the Harvard Medical School. Professor Kelly opened the day's program with a most interesting address on "The Uses of Radium in Surgery." After discussing very completely the

physics and chemistry of this most valuable substance he gave an elaborate historical review of its discovery and then told of the difficulties encountered in obtaining it. The doctor told of the many wonderful results from its use in epithelioma of the face, inoperable carcinomas and prophesied that uterine fibroids henceforth would not require any further surgical intervention by means of the knife. Dr. Kelly is now the possessor of \$50,000 worth of radium and hopes to procure at least double that amount for use in his cases.

In the short intermission before Doctor Kelly's clinic, Doctor Thomas F. Story, Secretary-General of the Fourth International Congress of School Hygiene, explained the essential purposes of the convention which is to meet in Buffalo August 25-29 of this year. It is hoped that our alumni will be in evidence at this important meeting.

At the Gynecologic Clinic, arranged for by Doctor Goldsborough for Prof. Kelly, three cases of pelvic infection, respectively 24 and 30 years of age, were shown and fully discussed, special emphasis being laid on the symptomatology and physical signs of the respective cases and the advisability of conservative treatment in such cases.

At 1:30 Dean Williams and the Faculty tendered a luncheon to the alumni in the College Library, at which there were by actual count 239 present.

At the afternoon session Prof. Cabot gave a medical clinic in five cases which Dr. DeLancy Rochester arranged for. There were two cases cardio-sclerosis in the uncompensated stage, one case of mitral stenosis in a young girl, one case of congenital heart disease (a patulous ductus arteriosus) in a young boy, and a case of pernicious anemia. This was followed by an address, "Gynecology, Retrospective and Prospective," in which Prof. Kelly, after tracing the beginnings of gynecology down to the present time, gave a very glowing and masterly prophetic outlook for his favorite specialty.

THE ANNUAL BUSINESS MEETING.

The annual business meeting of the association, on Wednesday afternoon, was called to order by the acting President, Dr. Wm. R. Palmer of Johnsonburg, Pa., first vice-President of the association. In the routine business that regularly came before the association, the Secretary read the necrology list that showed the death of twenty-nine of our alumni during the last year.

List:

Frederick F. Hoyer, class '49, said to have been the oldest practitioner in New York State, died at his home in Tonawanda, August 16, 1912, aged 90 years.

John G. Collver, class '54, practiced for more than forty years at Waterford, Ont., died September 2, 1912, aged 85 years.

Francis Findlay, class '60, of Franklinville, N. Y., died in Parkville, Mo., October 3, aged 78 years.

Coleman N. Clark, class '65, died January 30, 1913, at St. Charles, Minn., aged 73 years.

Robert A. Gunn, class '66, died at Bellevue Hospital, December 7, aged 68 years.

Ernest L. Shurley, class '66, died at Harper Hospital, Detroit, Mich., of heart disease, May 10, 1913, aged 67 years.

Albert C. Bunn, class '67, first medical missionary to interior of China, died at Asheville, N. C., December 24, 1912, aged 67 years.

Malcolm N. McNaughton, class *68, died at Villisca, Iowa, June 23, aged 63 years.

Frank A. Jones, class '69, died at Rochester, N. Y., aged 53 years.

Wm. Quincy Huggins, class '70, one of the oldest practitioners of Niagara County, died at his home, Sanborn, N. Y., October 21, 1912, aged 70 years.

Ludwig O. Thoma, class '70, died in Berlin Hospital on June 22d.

DeWitt C. Hunter, class '73, practitioner for more than fifty years, died at his home in Rochester, N. Y., October 21, 1912, aged 78 years.

Wm. E. Fitzgibbons, class '74, of Oglesby, Ill., formerly of Wataga, and for two years Health Officer of Peru, died at La Salle, Ill., October 3, 1912, aged 63 years.

Herbert P. Sheldon, class '79, died at his home in Scottsbluff, October 3, aged 57 years.

Pardon L. Kimball, class '80, veteran of Civil War, formerly practitioner in Illinois and Iowa, died at his home in Long Beach, Cal., recently, aged 71 years.

Paul F. Bussman, class '82, died December 19, at his Buffalo home, aged 52 years.

Herbert W. Davis, class '83, died at Jamestown, September 17, aged 50 years.

Delos B. Manchester, class '83, for many years practitioner of Oneonta, N. Y., later resident of Grant's Pass, Oregon, died at the home of his brother at Schenevus, N. Y., aged 54 years.

John W. Burchard, class '84, died at his home in Bradley, S. Dakota, August 15, aged 65 years.

Louis Pfandhoefer, class '86, died at his home, Falls City, Oregon, January 9th, aged 60 years.

Earl A. Scofield, class '87, died at Bemus Point, June 24th, aged 57 years.

Edwin L. Wood, class '88, died at Beausoil, France, June 2d, 1912, aged 51 years.

Alfred W. Henckell, class '89, died at Rochester, N. Y., June 30, 1912, aged 46 years.

Eva Viola Mead, class 1900, died at her home in Buffalo, November 20, 1912, aged 41 years.

Wm. H. Loughhead, class '91, died in hospital at Hornell, after operation September 12, 1912, aged 52 years.

Edward J. Kiepe, class '97, died at Kansas City, November 23, aged 46 years.

Samuel B. Baker, class 1899, died at his home in Rochester, N. Y., May 27th, from heart disease, aged 43 years.

Clarence S. H. Darlington, class '02, of Oklahoma, died in Buffalo, August 18, aged 33 years.

Charles Richards, class 1904, died suddenly at his home in Sturgis, S. Dakota, August 4th, aged 40 years.

Wm. H. Prudden, class '05, of New York City, died at Roosevelt Hospital, July 24, 1912, aged 30 years.

A special eulogy was given on the life of Dr. Shurley by Dr. DeLancey Rochester, and a set of memorial resolutions drafted by a committee consisting of Henry R. Hopkins, '67; Peter W. VanPeyma, '72, and DeLancey Rochester, '84, was unanimously adopted, after which Dr. Hopkins pronounced a eulogy in a memoriam of Frederick F. Hoyer of class of '49, closing with the following poem, which, for effectiveness and solemnity, could not be excelled:

OVER THE RIVER.

Over the river they beckon to me,
White, Moore, Hadley, Lea,
Rochester, Eastman, Mason, see,
Over the river they beckon to me.
Loved ones who've crossed to the farther side,
Hoyer, Shurley, Wende, see,
They watch and beckon and wait for me.
Folwell, Phelps, Davidson, see,
Over the river they beckon to me.

They crossed in the twilight gray and cold,
And the pale mist hid them from mortal view;
The gates of the city we could not see.
Over the river—over the river—

King, Gray, Harrington, see,
My brothers stand waiting to welcome me;
Potter, Dayton, Wyckoff, see,
Over the river they beckon to me.

We only know that their barks no more
May sail with us over life's stormy sea.
Daggett, Nichell, O'Brian, see,
Over the river they beckon to me.
Yet, somewhere, I know, on the unseen shore,
They watch and beckon and wait for me.
Hoyer, Wende, Shurley, see,
Over the river they beckon to me.

HENRY REED HOPKINS, '67.

May 28th, 1913.

REPORT OF EXECUTIVE COMMITTEE.

May 28, 1913.

*To the Members of the Alumni Association, Medical Department,
University of Buffalo:*

Fellow Alumni:

At the last annual business meeting of our Association the Executive Committee of 1911-12 recommended the four following resolutions, which were duly adopted:

1. That class reunions be held every five years in place of every ten (10) years, as heretofore.
2. That an Annual Alumni Dinner be the social feature of every annual meeting.
3. That an alumni catalogue be published.
4. That we request the Council of the University of Buffalo for representation on its body, such representation to be elected by our Association.

The import of these resolutions in rousing a spirit of enthusiasm and thereby inspiring our members with loyalty to Alma Mater cannot be overestimated. The efficacy of the first two resolutions was demonstrated by the large attendance of the "reunion classes," and the social success of the last annual dinner.

The Alumni Register is now in process of compilation, and had it not been for the tardy replies of some of our recalcitrant members, it would have been in the hands of our members ere this. We, therefore, strongly urge that those who have not re-

sponded will do *so at once*, so that the register may be as complete as possible. (Cards may be procured from Miss Emma L. Chappell). Complete or incomplete, the catalogue will be in your hands by October or before.

The fourth resolution was referred to a special committee, consisting of Doctors Rochester, Allen, Jones and Kauffman, and their report will be submitted at this meeting.

In order that our alumni may be more firmly united and thereby become a factor for good in the development of our Alma Mater, as a high-class medical center for both medical education and medical research, we recommend:

1. That an Alumni Fund be established by our Alumni Association to be subscribed to by our members and others whom we can influence to give to same. This fund to be controlled by the Alumni and the interest only to be used for the purpose or purposes as the members of this Association may direct for the benefit of our Alma Mater, the Medical Department of the University of Buffalo.

2. That branch Alumni Associations with local organizations be established where there are sufficient numbers to warrant the organization.

3. That steps be taken toward the formation of an Associated Alumni of all the departments of the University of Buffalo.

4. In order that these purposes may be the more readily and effectively accomplished, the Committee recommend that our Alumni Association be duly incorporated.

5. We strongly urge the adoption of the recommendation of our efficient Treasurer, Dr. W. F. Jacobs, in regard to the abolition of Life Membership in our Association for the Alumni residing in Buffalo and vicinity.

Respectfully submitted,

LESSER KAUFFMAN, *Chairman*,
HARRY MEAD,
WM. WARD PLUMMER.

The Committee on Conference with the Council of the University relative to granting our Association representation on its body, said representative to be elected by our Association, reported through the Chairman, Dr. DeLancey Rochester, that the Council favored our resolution and were of the opinion that the Association elect a representative for a period of three to four years, said representative to take office on resignation or

death in the present Council. On motion of Dr. Grover Wende, amended by Dr. Kauffman, it was unanimously agreed that the Alumni Association approve the action of the Council and elect its representative for a period of four years, said representative serving such time as there may be a vacancy on the Council until commencement 1917, when a successor to the member-elect be chosen. Dr. Peter W. VanPeyma of the class of '72 was then unanimously elected as representative from our association on the Council of the University of Buffalo. It is hoped that this action will tend to arouse a better feeling among our Alumni to our Alma Mater, and that the spirit of loyalty and enthusiasm for Alma Mater will become more markedly in evidence from year to year, and will help to make the medical department one of the leading schools for instruction and research in medicine.

Dr. Herbert U. Williams, Dean of Department of Medicine, made the following statement at our business meeting, which you are requested to read over carefully:

The Executive Committee have asked me to make a statement to the Alumni similar to that I made a year ago. On that occasion the organization and general condition of the Medical Department were discussed, and it will not be necessary to cover that ground again. I wish, however, to repeat one statement made at that time, namely, that the University of Buffalo is not a stock company, and that although it was originally organized as a stock company, the stock was abolished by act of legislature several years ago. The title to the property of the University is vested in the Council.

Probably the most important move that the Medical Department have made during the last year has been to increase the entrance requirements, beginning with September, 1914. After that date every student entering upon the study of medicine will be required to have completed a year of work of college grade in Physics, Chemistry, Biology and either French or German. The Council of the University of Buffalo is now organizing courses in arts and sciences of college grade, equivalent to the freshman year of the B. S. course in standard colleges. During the session of 1913-14 the classes will be held in the medical building. Students intending to study medicine will thus be able to obtain preparation in the University.

The University has a field of work in Buffalo and the surrounding country entirely outside of the teaching in the regular departments. University extension methods have been used very extensively in many parts of the country. A beginning was made by the University of Buffalo last winter in no less than four different directions. A course of evening lectures and

demonstrations in Physiology were given by Dr. Pratt to a class of teachers from public schools. Dr. Sy and others gave a course of lectures on Domestic Chemistry on Saturday afternoons which were remarkably successful, the attendance constantly being from 150 to 200. A laboratory course in connection with these lectures was attended by a group of young women. Still another course of lectures was given on Sunday afternoons on a variety of topics relating to medicine and public health of a popular character. The course was planned and arranged by Dr. Lucien Howe, who conducted the first lecture. The attendance was usually from 150 to 200 persons. Finally, members of the Faculty have offered their services in giving lectures to outside organizations on medical topics, both in Buffalo and in surrounding towns. The number of requests for such lectures has been large, and a field of usefulness for the University in this direction seems to be clearly indicated. All of these lines of activity, or similar lines, will be followed out during the ensuing year. Our two new Professors, Dr. Pratt in Physiology and Dr. Butsch in Pharmacology, have been of great assistance in these enterprises, as they have been successful in conducting the work in their own departments.

Officers for ensuing year were elected as follows:

President, Grover W. Wende, '89, Buffalo.

1st Vice-President, George E. Brewer, '84, New York City.

2d Vice-President, George W. Goler, '89, Rochester.

3d Vice-President, Frank W. McGuire, '94, Buffalo.

4th Vice-President, Cynthia W. Stover, '06, Williamsport, Pa.

5th Vice-President, Wm. Irving Thornton, '99, Buffalo.

Secretary, Julius Richter, '04, Buffalo.

Treasurer, William F. Jacobs, '08, Buffalo.

Trustee for 5 years, Henry C. Buswell, '88.

Executive Committee, Lesser Kauffman, Harry Mead, Edith R. Hatch.

THE ANNUAL DINNER.

The annual dinner of our Association, which was the social event of our meeting, occurred on Thursday evening, May 29th, at the Hotel Statler. There were 175 present at the table, and after an excellent repast enjoyed by all the toastmaster of the evening, Dr. DeLancey Rochester, was introduced by Dr. Wm. R. Palmer, who presided. Dr. Rochester acquitted himself in his usual happy and effective manner, introducing each speaker fittingly. Prof. Roswell Park replied on behalf of the Faculty, stating the progress our Alma Mater had made in the past year. Dr. S. V. V. Holmes, in his charming and felicitous style, spoke

on "College Spirit." Those who were present surely carried away something of the Williams College enthusiasm. Prof. Howard A. Kelly gave a short toast on "The Ideals of the Profession," laying special emphasis on the moral responsibility of the physician. The principal address of the evening was given by Dr. W. K. Wicks of Syracuse, who came by invitation and gave a clinic, "The Anatomy of Humor," which was quite apropos to a gathering of medical men. Dr. W. H. Johnson, President of the graduating Class, responded on behalf of his classmates, and "Tom" McKee spoke for the Reunion Classes in his usual effective and yet pithy manner. If there were a few more McKees in our Association nothing would be too good for our Alma Mater. The surprise of the evening was the presentation of suitable gifts to Miss Emma L. Chappell, who had resigned from the position of College Secretary and Registrar to the Medical Department after faithfully performing the duties of her office for twenty years. In recognition of her fidelity, devotion and uniform courtesy, the general Faculty, through the Chairman of the Special Committee, Dr. Allen A. Jones, presented her a fine traveling bag and a set of resolutions, and on behalf of the Alumni, Dr. Edith R. Hatch responded likewise. It is to be noted that during her connection with the University, Miss Chappell never by word or action ever offended a student, an alumnus or a member of the Faculty.

Impromptu toasts were responded to by Dr. Dewitt H. Shumay for the "Bachelors" on the Faculty, Dr. Wm. House on "Medicine in the Wild and Woolly West," and Dr. Thomas H. Story on "The Fourth International Congress of Hygiene."

FRATERNITY REUNIONS.

The Fraternity Reunions were held on Wednesday night. The Nu Sigma Nu (I. C. I. Chapter) held a banquet which was very largely attended at the Hotel Statler. The Phi Rho Sigma (Alpha Omega Delta Chapter) and the Omega Upsilon Phi entertained their members at their Chapter Houses.

The attention of the Alumni is directed to the U. of B. paper, *The University Bison*, which is edited and controlled by the student body. This paper is to appear monthly during the college year and contain all the college and departmental news—a special feature is to be the Alumni page. Better subscribe, if you have not done so. Cost 25 cents per annum.

In summing up the results attained during the past year, it is interesting to note a steady and healthy increase in every particular. Registration in 1912, 263; in 1913, 324. In 1912, after

refunding the Faculty over \$120 for money advanced for printing, etc., we showed a balance of \$132. This year our balance is over \$250. The annual dinner in 1912 showed an attendance of 130, this year 175. The attendance at the clinics, business meeting and luncheon were all commensurably increased.

The Executive Committee wish to call your attention that the 39th annual meeting occurs June 2-5, 1914; the classes of 1864, 1869, 1874, 1879, 1884, 1889, 1894, 1899, 1904 and 1909 will hold reunions. Arrangements are already under way for a better attendance and a program equally as good as this year. Remember, please, that a new constitution and by-laws are to be presented, as well as action taken on the incorporation of our Association. It therefore behooves every alumnus, even if he or she be not a member of the reunion classes stated above, to make it a point to attend.

For the benefit of the reunion classes, it should be stated that the class of 1904 is already planning its tenth reunion. This class wishes to show its fellow alumni what enthusiasm and loyalty to Alma Mater means.

ALEUCOCYTHAEMIC LEUKAEMIA. Rupert Waterhouse, *Bristol Medico-Chir. Jour.*, March, 1913, refers to the literature and cites three cases, the red cells ranging about a million, sometimes less; the whites from 6000 to 7000 in one case, 8600-12800 in another, 3000-108000 in the third. The presence of 90 per cent. or more of lymphocytes, with myelocytes, slight enlargement of the spleen, epistaxis and enlarged glands, especially cervical, he considers adequate to a diagnosis. (Note—Personally, we must confess that, with the part of Hamlet omitted, we should scarcely recognize the play as Hamlet, unless the lines were otherwise very closely followed.)

VIRGINAL MAMMARY HYPERTROPHY. Battle Malone, *Memphis Med. Mo.*, Dec., 1912, reports a case in a girl of 14, the growth having occurred within a year, from the size of hens' eggs to enormous masses reaching to the pubes. Elevation of the breasts was attempted as a palliative, but always brought on rigors and elevation of temperature to 103 or 104. They were, therefore, removed. Pathologic examination revealed numerous small cysts and increase of fibrous tissue with areas of newly formed glandular cells. Recovery.

TRANSPPOSITION OF VISCERA. S. Neuhof, *Post Graduate*, reports congenital cases in brother and sister. Another sister had cardiac enlargement with mitral and probably pulmonary leakage, following endocarditis, in a heart originally normally placed.

BUFFALO MEDICAL JOURNAL

A Monthly Review of Medicine and Surgery

EDITOR AND PUBLISHER DR. A. L. BENEDICT, 228 Summer St.,
corner of Elmwood Ave., Buffalo. (Address for all communications. Please make
personal and telephone calls before 1 P. M.)

THE BUFFALO MEDICAL JOURNAL is the third, in age, in the western continent. It is independent but supports professional organization. As a scientific medium it is unrestricted in territory. As a news medium, it is limited mainly to the western four districts of the Medical Society of the State of New York. The co-operation of physicians is asked in securing personal, obituary and other news items. Secretaries of Medical Societies in this region are requested to send brief reports of meetings. Full transactions will be published at cost of composition.

Subscription \$2.00 a year in advance; \$3.00 for two years in advance. Changes and errors in address or failure or duplication of delivery, should be reported immediately. Back numbers will be supplied, if possible but requests for copies should be made promptly.

YEARLY VOLUME 68.

JULY, 1913

No. 12

Every excessive fee is an argument for the establishment of the British system of co-operative medical insurance; every inadequate fee, a basis for compensation under such a plan.

Collegiate Year for Medical Matriculants.

Some time ago we noted that the Medical Department of the University of Buffalo had taken the initiative toward securing the legal requirement of a year in college, in addition to the full high school course which is the present standard for medical matriculants for New York. We have also called attention to the fact that several states already require one or two years of college study and that the prestige of the Empire State must suffer if its authorities did not respond to the demand, for at least as high a standard as is required by states of less population, less wealth, and presumably less progress from the pioneer period, which excuses some degree of laxity in formal educational requirements.

We feel a sense of local and personal pride in giving publicity to the announcement made at the recent commencement season, that the University of Buffalo, without waiting for the action of the State Board of Regents, will, of its own volition, enforce the requirement of a collegiate year, beginning with the session of 1914-15. Inasmuch as the University itself made the first formal, institutional demand for such a standard—not to mention the fact that various of its alumni and faculty have individually advocated such a standard for many years—it is obvious that, to

have waited for legislation, would not have indicated yielding to compulsion. Nevertheless, to have anticipated the legal requirement indicates a considerable degree of moral courage, since the action concedes to other schools a material competitive advantage, unless they also manifest the same broadminded and far-seeing policy of disregarding quantity for quality.

Several medical schools, heavily endowed or liberally supported by public or private funds, spend annually more than three times the receipts from students' fees, even including institutions whose student body is large enough for the maximum economic efficiency. It is fortunate that they can do so, although it has occurred to us that the unnecessary elegance of grounds and buildings and the almost entire freedom from economic worry in the provisions for every detail, whether essential or merely convenient and desirable, surround the medical student with an atmosphere of luxury which may not be the best preparation for the extremely rarified atmosphere in which he must spend at least the first decade of life as a practitioner, unless he is himself endowed.

In contrast to such ease of management, the conduct of a practically unendowed medical school, handicapped at the outset by a somewhat limited territory and population, imposing upon itself the further restriction of standards of education surpassed in only a half dozen states and by only a few wealthy institutions, and maintaining except in unessential details the maximum standards of technical pedagogy, is a business problem demanding a grade of business sagacity and ability worthy to rank with some of the greatest exploits of the commercial world.

Right here we wish to anticipate a possible charge of inconsistency. We have, personally and editorially, since and long before assuming charge of this journal, called attention to the well-known fact that the medical profession is overcrowded, and have advocated various measures tending to re-establish a balance between supply and demand. Is it not obvious that the quickest way to bring about this end would be to close the medical colleges, using every means in our power to eliminate one after another, as they showed signs of weakness, financial or otherwise? In our opinion a prompter, more radical method and one involving exactly the same ethical factors would be the assassination of physicians already licensed. In other words, we believe in the sixth commandment and, while recognizing the ultimate economic disturbance of supply and demand, we believe that the problems which it presents must be met in a reasonable and ethical spirit. Among other reasons for avoiding harsh and radical measures are the rights of the individual to choose his own vocation, sub-

ject to reasonable limitations applicable to all, and to be able to pursue that vocation without the prohibitive requirement of study at too great a distance from home; the right of the community to continue established institutions which redound to its credit and which will become more and more necessary as time passes, after temporary inequalities of the law of supply and demand have righted themselves; the right of the personnel of the institution to continue activities for which they have fitted themselves.

A very significant factor in the present agitation with regard to the status of medical schools is the prominence given to money in applying the general principle of the survival of the fittest. Without underestimating the necessity of equipment and forms of labor requiring money, it seems to us that the utmost caution should be observed by the profession in supplanting ethical ideals with the coercive argument borrowed from certain forms of commercial enterprise.

We bespeak, therefore, for the University of Buffalo the cordial support of the profession, especially at this time when it has voluntarily assumed an additional burden in the cause of advanced educational standards. This support can be manifested in many ways, not forgetting the direct one which is so obvious as to require no mention. We trust that civic and sectional pride will also be touched by a realization that an advance in the education of the prospective medical practitioner confers an advantage on the community as well as the profession—perhaps more.

We are pleased to announce further that the University of Buffalo will, itself, organize a course including such collegiate studies as are especially preliminary to the medical course, and we hope that this course may prove to be the practical beginning of the department of liberal arts so long contemplated and so much desired.

For the present the course will be given in the Medical Building. The science course required of medical students is one year of work in Physics, Chemistry and Biology, and either German or French. There is no reason why this course may not be pursued by others than those planning to take up the study of medicine, and if a sufficient number desire it, additional courses in English and Mathematics will be given. By substituting the latter subjects for one or two of the science subjects the equivalent of the freshman year in a course leading to the degree of B. S. in standard colleges may be secured.

Why Do Quacks Advertise to Regular Physicians?

It is a common occurrence for physicians to receive circulars advertising methods of treatment, offering commissions for reference of cases or simply asking for patients. In certain instances

these advertisements are proper enough—or rather, would be if placed in the advertising columns of a medical journal—with the exception of those offering commissions. But, in many instances, these circulars come from the veriest quacks. If it was not for the “Dr.” in the address, we might well imagine that physicians’ names had been taken from some extra-professional list, but investigation shows that medical lists are designedly followed. We might suggest that the quacks enjoy waving a red rag before a bull for the pleasure of seeing him charge and hearing him snort. Most of us do snort, but the man who paid for the privilege of stirring us up is not at hand to enjoy his joke. Is it possible that there are enough qualified regularly licensed physicians who respond to these circulars?

Physicians’ Investments.

We often hear of being let in on the ground floor. A recent advertisement of stock in a diamond mine gives its address as “The Third Floor Annex”—no name of building added. That is about as near the ground floor as doctors ever get in stock investments.

Red Tape or Phthisiophobia?

The *Buffalo Evening News* has recently called attention to the case of a girl dying of tuberculosis and endangering three other children compelled by poverty to share the same room with her. No hospital could be found to take the case, under existing conditions. What impresses us particularly is that the means suggested for solving the problem are the erection of a temporary tuberculosis hospital and, in the emergency, erecting a tent to accommodate the child at an out-door camp.

We do not, by any means, disapprove the general opinion that tuberculosis, by virtue of its prevalence and certain characteristic features, is best treated at special institutions nor do we ignore the danger of the bacillus. In fact, our friend S. A. Knopf has called us a phthisiophobe because we do not subscribe to the recent dictum that the cleanly consumptive may be cared for in his own home without danger. But there are plain humanitarian duties which ought to outrank the more or less theoretic duty of considering the interests of the uninfected, in cases of this degree.

It seems only a short time since the writer was regarded as very young and germ-crazy for protesting against the treatment of consumptives in public wards along with a dozen or more patients of other kinds. The pendulum of professional opinion

has certainly swung very fast if it is now considered impossible to give the tuberculous poor, housing and nursing and relief in a hopeless case, in a general hospital for fear of infecting other inmates. Without reviewing details of conveyance of infection, etc., familiar to all students, we feel justified in claiming that there is no hospital of modern equipment which could not treat consumptives in a separate ward with such precautions as to render transmission of the disease practically impossible. And, in an advanced case, beyond the stage at which climate, fresh air, and other hygienic means are necessary because they add favorable factors to the treatment of a case in which hope of cure remains, we can see no reason why a special hospital is at all essential, however desirable it may be for various reasons.

THREE KINDS OF TUBERCULOUS HOSPITALS.

For the sake of facilitating criticism and of making the matter plain, especially since the care of the tuberculous has, at last, enlisted popular enthusiasm and arguments have become crystallized into slogans whose full meaning is not apparent to all, we may be pardoned for presenting some thoughts in a rather dogmatic way.

1. The provision of special hospitals for tuberculous patients is not nearly so important as the provision of still more highly specialized institutions for different types of tuberculosis.

2. From the practical standpoint of prophylaxis and therapeutics, tuberculosis resolves itself into three principal groups: I. Latent and susceptible (according to the lay nomenclature, "threatened") cases; II. Moderately advanced, but still relatively hopeful cases, with discharge of bacilli, so that, with appropriate qualifications and apologies, they may be termed "contagious"; III. Far advanced, hopeless cases which are "contagious" not only in the sense applicable to the preceding group but because the prostration and mental hebetude or actual unconsciousness or mental perturbation of the patient prevents him from practicing the precautions which minimize the danger of "contagion" in conscientious and intelligent patients of the second group. It is self-evident that these lines cannot always be drawn with exactness in the practical assortment of cases and that they do not complete either the pathologic or the prophylactic and therapeutic grouping, especially with regard to non-pulmonary cases. They suffice, however, for present purposes.

3. It is obvious that, merely from the psychic standpoint, it is desirable to segregate these groups from one another, not

only for the comfort of the patients but to secure the ultimate results aimed at.

4. Even the economic maintenance of institutions requires the sharp division indicated and the word economic should be understood as applying to the individual as well as to the supporting community. The first group of patients require very little technical nursing, comparatively little individualized dieting, much fresh air but probably no special climate, moderate exercise and, consisting largely of young persons, considerable direction and discipline, not only in the ordinary sense but in that of imitating, so far as practical, the ordinary routine, educational and otherwise, of normal young persons. To mix such a group of individuals with more advanced patients requiring formal nursing, individual diet, almost complete rest, and what may be termed quarantine measures against mutual infection and establishment of fomites, quite aside from the actual danger to the incipient group, requires a much more expensive plant and higher maintenance charges. Again, the incipient group is not usually regarded as requiring any special climate, provided the location of the institution is salubrious, whereas the question of climate for the second group is sub judice. The third group, again, being mostly bed-ridden and, barring very desirable errors in prognosis, doomed to death in a comparatively short time, requires quite different details of institutional management from the second. There is the same physic objection to mixing the two groups, climate is a negligible factor and propinquity to the home of the patient is far more important than in the first two groups. It would be going too far to say that the management of the dependent tuberculous class or of tuberculous patients in general as a sociologic problem, should not be unified so far as possible and there are circumstances such as small population of the political unit concerned, or fewness of its tuberculous cases, or the coincidence of eligible sites in the immediate neighborhood, which will justify the treatment of all groups of cases in the same institution, with such subdivision and segregation as may conform to the general principles stated.

Editorial Announcements

The August issue will consist largely of articles bearing on Child Welfare, on account of the meeting in Buffalo, August 25-30, of the Fourth International Congress on School Hygiene.

Subscriptions.—Last year it was announced that as soon as the advertising pages regularly numbered 50, the subscription would be reduced to \$1.50 net in advance. We are gradually

approaching this mark and bespeak the continued assistance of our readers by occasional suggestions, influence and attention to the advertisements themselves. As we have held our own in spite of the summer vacation of several pages of advertising, we hope for a decided increase in the fall. Our promise requires one qualification: Medical advertising is beginning to include certain forms of announcement requiring large space and ordinary type, which, very properly, is rated at a lower price than ordinary, brief, display advertising. We have printed certain advertising of this kind and have under consideration at present quite a large contract. Obviously, such additions, must be estimated at their approximate equivalent in ordinary advertising space.

A careful estimate of finances shows that if we can add, practically at one time, 500 new subscriptions, the same reduction will be feasible. We will, therefore, allow the \$1.50 rate to bona fide new subscribers, to any old subscriber who pays two years in advance, or who includes in his remittance that of a new subscriber. This is a net rate for advance payments and applies only to remittances of par value in Buffalo banks, not to checks subject to discount. Postage stamps will be taken at their face value.

Owing to the absence from the city of a correspondent, we have been unable to secure an account of the Commencement and Alumni meeting of Syracuse University.

TOPICS OF PUBLIC INTEREST.

CHAUTAUQUA COUNTY TUBERCULOSIS HOSPITAL ENDOWED. Mrs. Elizabeth M. Newton, a former resident of Fredonia, who died in California about the middle of May, has left \$150,000 for this purpose. She also left \$6,000 to endow a bed in the Brooks Memorial Hospital of Dunkirk for poor patients from Fredonia, and other sums for charitable purposes.

GRADUATION AND LICENSE OF PHYSICIANS. A noteworthy difference exists between the number of graduates and of licenses issued. In 1912 the former amounted to 4,483, the number being about the same for 1911; 6,723 licenses were issued, 5,466 by examination, 116 by registration under exemption laws, 1,141 by reciprocity. Six thousand one hundred physicians were examined, the apparent discrepancy being due to the proportion of failures. Of these 6,100, 5,287 were recent graduates, 1908-1912; 843 of longer standing. These figures indicate a considerable number of removals in the attempt to find a satisfactory location, not to mention changes of location in any one state.

THE CROUSE-IRVING HOSPITAL, a private institution of Syracuse, has been incorporated and its scope and capacity will be enlarged.

Total resistance of body assumed to be	Results of brief exposure to passage of alternating current at a pressure of		
	100 volts	1,000 volts	10,000 volts
Very low, with good contact, 1,000 ohms	Certain death, slight burns	Probable death, marked burns	Survival, burns and other sequelae very severe
Higher, about 10,000 ohms	Painful shock, but no injury.	Certain death, slight burns	Probable death, severe burns
High, with bad contacts, 100,000 ohms	Scarcely felt	Painful shock, but no severe injury	Certain death, burns slight if resistance remains high

—Jex Blake.

PROPORTION OF IMMIGRANTS DEBARRED IN LAST FIVE YEARS FOR MEDICAL REASONS.

Year	Total Immigration	Mental Defects	Debarred per 100,000 for Following Reasons	
			Epilepsy and Insanity	Loathsome or Dangerous Contagious Disease
1908.....	782,870	23.7	23.5	371
1909.....	751,786	24.1	22.2	317
1910.....	1,041,570	17.4	19.0	300
1911.....	878,587	18.8	16.6	325
1912.....	838,172	19.7	16.0	208

NOTE.—Compiled from annual report of Commissioner General of Immigration for fiscal year 1912.

HOSPITAL FOR THE TONAWANDAS. Business men have offered \$40,000 for the erection of hospital on Christiana street, North Tonawanda, provided the city will provide for its maintenance. Efforts have been made for twenty years in this direction and we trust that the Twin Cities, which ought to be one, will recognize the need of co-operation to insure economic concentration of management.

LOCKPORT QUARANTINE HOSPITAL. The Board of Health has adopted a second resolution, urging the Common Council to provide such an institution, Buffalo having notified that Lockport patients can no longer be accommodated.

STATISTICS OF PHYSICIANS.

States	Total 1 Physicians	1 Allopaths	2 Homeopaths	3 Eclectics	4 Osteopaths	5 Un- classified
Alabama	2,418	2,332	12	50	12	24
Arizona	247	227	14	4	4	2
Arkansas	2,96	2,505	36	30	23	25
California	4,796	3,967	408	374	432	47
Colorado	1,772	1,516	171	68	127	17
Connecticut	1,564	1,315	151	83	25	15
Delaware	246	205	33	6	2	2
Dist. of Columbia	1,350	1,250	78	9	23	13
Florida	974	908	30	27	20	9
Georgia	3,022	2,633	25	334	47	30
Idaho	420	374	17	25	40	4
Illinois	9,988	8,094	1,112	683	336	99
Indiana	4,984	4,077	297	557	82	49
Iowa	3,653	3,005	387	225	136	36
Kansas	2,688	2,155	208	299	152	26
Kentucky	3,601	3,301	134	130	64	36
Louisiana	1,930	1,857	30	24	15	19
Maine	1,176	1,045	97	23	18	11
Maryland	1,972	1,800	141	12	14	19
Massachusetts ...	5,648	4,858	635	99	160	56
Michigan	4,104	3,243	582	238	123	41
Minnesota	2,262	1,987	196	57	106	22
Mississippi	2,009	1,960	3	26	50	20
Missouri	6,037	5,114	319	544	296	60
Montana	512	485	25	7	40	5
Nebraska	1,796	1,349	126	304	101	17
Nevada	144	131	5	6	5	2
New Hampshire..	704	614	64	19	9	7
New Jersey	2,884	2,456	345	55	125	28
New Mexico	430	395	18	13	21	4
New York	14,815	12,805	1,305	557	288	148
North Carolina ..	1,849	1,813	8	10	23	18
North Dakota ...	594	563	15	11	24	5
Ohio	7,713	5,786	906	746	160	75
Oklahoma	2,620	2,337	62	195	88	26
Oregon	1,041	933	46	52	98	10
Pennsylvania	11,345	9,812	1,153	267	272	113
Rhode Island	751	686	57	1	17	7
South Carolina	1,275	1,254	4	5	12	12
South Dakota	651	560	37	48	32	6
Tennessee	3,338	3,128	28	149	52	33
Texas	5,888	5,479	82	269	120	58
Utah	427	395	14	14	12	4
Vermont	670	592	57	24	12	6
Virginia	2,359	2,283	35	18	16	23
Washington	1,630	1,481	73	60	136	16
West Virginia ...	1,639	1,492	28	103	17	16
Wisconsin	2,652	2,289	224	113	50	26
Wyoming	235	216	10	7	7	2
Total	137,199	118,666	9,954	7,330	3,994	1,349

(1) A. M. A. Medical Directory, (2) W. A. Dewey, M. D., of Ann Arbor, Mich., estimate, (3) is a little over an exact count of the new card index of chief organizer Dr. Mundy, (4) *American Journal of Osteopathy*.—Assembled Statistics by *The N. E. M. A. Quarterly*.

RAILROAD ACCIDENTS. The Interstate Commerce Commission reports, for the fiscal year ending late in 1912, 169,538 injuries, 19,379 more than for the previous year, and 10,580 deaths, 394 more than for the last year. Approximately 1,500,000 deaths occur annually from all causes, so that about two-thirds of 1 per cent. of the annual death rate is directly due to railroads. Deaths due indirectly to injuries received in railroad accidents probably bring the proportion above 1 per cent. Railroad fatalities have increased by about 50 per cent. since 1909. About 4 per cent. of all deaths are due to violence, the honors being about equally divided between suicide and railroads. Railroad transportation kills about one and a half to twice as many as all other forms of transportation. Germany, Austria, Russia and France injured 2,494 and killed 394 by railroads last year.

COUNTY TUBERCULOSIS HOSPITALS. In our May issue we noted the opposition of Dr. John A. Rafter, Mayor of North Tonawanda, to the establishment of a Tuberculosis Hospital for Niagara County, on the ground of unsuitability of climate. Without taking sides as to the value of climate in the treatment of tuberculosis, except to the extent of calling attention to the various changes of professional opinion observed in the last thirty years regarding the optimum climate and citing personal and other experience that tuberculosis could be recovered from in the native environment, even if not especially favorable, we expressed the opinion that Dr. Rafter's opposition would serve a valuable end in bringing the discussion regarding county (or, for practical purposes, local) hospitals to a focus on the therapeutic point involved. Previously the problem has been mainly economic and with regard to securing necessary legislation.

The State Charities Aid Association, in its *May News*, publishes a considerable series of letters, all favorable to the County Hospital, or, at any rate, to some easily accessible institution. These we reproduce, as well as the letter from Dr. Hawes, not published in the *News*.

I hope to see many special hospitals thruout New York State to care for tuberculosis patients near their homes; it is both practicable and advisable to have such hospitals.

SIMON FLEXNER, M. D.,
New York.

(Director Rockefeller Institute for Medical Research.)

Most important function of tuberculosis hospitals is to furnish institutions where advanced or moderately advanced consumptives

can be rendered no longer dangerous to communities. Accessibility is therefore first consideration.

HERMANN M. BIGGS, M. D.,
New York.

(General Medical Officer New York City Department of Health
—Chairman Governor Sulzer's Public Health Commission.)

Our best hospital for consumptives is within Boston limits at Mattapan. Lakeville, North Reading Hospitals all at low altitude. Care of advanced cases important for prevention.

VINCENT Y. BOWDITCH, M. D.,
Boston.

(Former President of the National Association for the Study
and Prevention of Tuberculosis.)

Most important point in tuberculosis hospital provision is location close to community to be served. Climate anywhere in New York State is very favorable for treatment.

LIVINGSTON FARRAND, M. D.,
New York.

(Executive Secretary National Association for the Study and
Prevention of Tuberculosis.)

It is my firm conviction, based upon years of experience, that in the location of a hospital for the tuberculous, accessibility, convenience and economy are more important than any special climate and should be considered first.

S. A. KNOPF, M. D.,
New York.

(International Authority on Tuberculosis.)

Tuberculosis hospitals should be near center of population; dangerous cases will not, and far advanced cases cannot go far from home.

E. L. TRUDEAU, M. D.,
Saranac Lake.

(Pioneer of Outdoor Treatment of Tuberculosis in the United
States.)

Such institutions should be and are usually near homes of patients, elevated, if possible, in as good situation as possible, but always accessible regardless of climate.

E. R. BALDWIN, M. D.,
Saranac Lake.

(Leading Tuberculosis Expert, Director Harriman Research
Laboratory and Member of Governor Sulzer's Special Public
Health Commission.)

Climatic conditions of far less importance than proximity to center of population in county. Would strongly urge hospital to be built within five cent carfare of large city.

LAWRASON BROWN, M. D.,

Saranac Lake.

(Former Superintendent Adirondack Cottage Sanatorium, Saranac Lake.)

County hospital should be for advanced cases and located near homes of sick and relatives; more important than ideas of climate; open air treatment will be successful anyway if proper management and maintenance.

JOHN H. PRYOR, M. D.,

Buffalo, N. Y.

Governor Sulzer's Public Health Commission recently reported to Governor, among other things, that county tuberculosis hospitals should be established in counties not now provided therewith. Medical authorities regard accessibility of far greater consequence than climate.

ANSLEY WILCOX.

(Member Sulzer Public Health Commission and President of the Charity Organization Society of Buffalo.)

The wisdom of having the sanatorium accessible to centers of population has been demonstrated by the growth of Iola, Monroe County's tuberculosis sanatorium, adjacent to the city line of Rochester. In two and a half years it grew from ten patients to one hundred and twenty-seven with a constantly increasing waiting list and the hearty support of the local physicians.

MONTGOMERY S. LEARY,

For Board of Managers.

(Superintendent Monroe County Tuberculosis Hospital.)

The great local problem is caring for those who could never and would never go to a distance for treatment. To segregate the advanced cases is to protect the public from infection; each county must perfect measures to protect its own people.

JOHN F. W. WHITBECK, M. D.,

Rochester.

(President Medical Society of the State of New York.)

Treatment of tuberculosis cases very important as a preventive measure. Location of tuberculosis hospital close to centers from which patients will come, especially advanced cases, is far more important than the matter of climate.

FRANCIS E. FRONCZAK, M. D.

(Health Commissioner, City of Buffalo.)

The Commonwealth of Massachusetts,
Trustees of Hospitals for Consumptives,
3 Joy Street, Boston, Mass.

May 16th, 1913.

Mr. George J. Nelbach,
State Charities Aid Association,
105 East 22d St., New York, N. Y.

Dear Sir:

I take pleasure in answering the questions you have asked me to the best of my ability.

1. The State of Massachusetts did treat tuberculosis at first at a state problem. In the days that the State Sanatorium at Rutland was first established our one idea was to endeavor to cure the incipient cases.

2. As time went on we have certainly radically changed our views on the subject until those of us who are acquainted with the facts regard tuberculosis primarily as a local problem due to local causes. This change of opinion is due to the fact that we realize more and more that the advanced consumptive has every right to be kept in hospitals near his family and friends where he can be seen at frequent intervals. Of course, this does not mean in the slightest that we are going to do away with our State Sanatoria for the early and curable cases, as, in fact, we are constantly increasing all four State institutions.

3. Under the provision of the act passed in 1911 and modified in 1912, but not by any means as the result of these acts, about sixteen or seventeen of the towns and cities in this State of ten thousand inhabitants or over have provided themselves, or were already provided, with local tuberculosis hospitals, while about an equal number are either actually constructing, or are actively planning, such hospitals.

Finally, I would say that I have no sympathy with those who go to an extreme in this matter either in demanding that the work must be done entirely by the State or that it must be done entirely by local forces. There must be a wise and practical combination of both forces acting under a broad co-ordinated scheme.

Yours truly,
(Signed) JOHN B. HAWES, 2d,
Secretary.

In fairness to those of Dr. Rafter's opinion, it should be stated that the idea that climatic conditions have an important bearing on the treatment of tuberculosis is still strongly urged by many authorities, the argument being based both on empiricism and scientific consideration of the effects of sun-light, altitude, degree

of humidity, etc. We have always understood that the Saranac Lake authorities, considered their location as of direct climatic value and not as a matter of accidental convenience, while the J. N. Adam Hospital was deliberately located in Cattaraugus Co. at an altitude almost as great as that of Raybrook, accessibility being sacrificed for the sake of securing this advantage. It will also be noted that several of the opinions quoted apply especially to the treatment of advanced and incurable cases for which climate is admittedly a minor consideration and for which the institution of special hospitals depends mainly upon administrative details and the question as to the communicability of the disease. In regard to the last question, the same number of the *News* contains an article by Dr. Trudeau, entitled "Sanatoria not a Menace," alluding to the alleged danger to neighboring population. Regarding the accessibility of a hospital, it should be borne in mind that the problem for a county like Niagara is quite different to that presented to counties of absolutely much greater population and with 90 per cent. or more of the population concentrated in one city. Niagara County has a total population of 92,000, of which 30,000 is in Niagara Falls, 18,000 in Lockport and 12,000 in North Tonawanda, the rest scattered. So far as climate is concerned, the main point to be considered is altitude, although strictly local items, as nature of soil, swamps, factory fumes, dust, exposure to wind, etc., would present themselves. We are inclined to concede that the problem of selecting an available site, with reference to economy, salubrity and accessibility might present many unforeseen difficulties. In regard to altitude, Niagara County is divided pretty sharply by the Niagara escarpment into plains, one slightly above the Lake Ontario level, the other averaging somewhat lower than the Lake Erie level. With the obvious qualification that there are individual exceptions, especially along the boundary, it may be said that the higher altitudes of Niagara County are lower than the lower altitudes of Erie County. With the recent highly approved action of Erie County of going beyond its own hilly region to secure a better site in Cattaraugus County and the existence of a considerable weight of professional opinion favoring moderately high or even mile-high altitudes, and with the successful campaign for state care of the tuberculous in specially selected, elevated regions, still a matter of recent history, it seems to us that a judicial attitude should be assumed toward Dr. Rafter's contention.

To prevent misunderstanding, we may add that we do not personally regard altitude or any other climatic factor consistent with general salubrity as essential in the treatment of tuberculosis; on the contrary, we rather favor the idea that the average—

though not every—patient will do best in the climate to which he is accustomed. We hold also that every person, with tuberculosis or any other lesion, who cannot command adequate private means for proper treatment, should be publicly assisted. Whether this assistance is given by the county, municipality, state or nation, is to be decided according to practical considerations only indirectly related to medicine. We are not inclined to make the name County Tuberculosis Hospital a shibboleth since the term county stands for very different conceptions of wealth, population, density of population, prevalence of the disease, proportion of dependent population, availability of salubrious sites, etc.—not to mention that the rather sudden drop from the authoritative opinion regarding high altitudes has rather stunned our reasoning faculties on this point. The fact mentioned by Assistant Secretary George J. Nelbach of the S. C. A. A., that other states have blindly copied the New York law, even to “mistake in phraseology and pronunciation,” confirms our opinion, expressed in the May issue, that Dr. Rafter, in his role of a doubting Thomas, has done a real service to the cause by interposing a temporary obstacle.

EXAMINATION OF CANDIDATES FOR ASSISTANT SURGEON. The Public Health Service announces examinations in Washington, Boston, New Orleans and San Francisco, July 7 and August 4. The initial salary is \$2000 with quarters, or commutation at \$30 per month. Appointments are permanent and promotions to be expected gradually lead to a salary of about \$6000. This is in many ways the most desirable government medical service.

THE CASE OF THE ROME INFIRMARY DOCTORS. Last year the Oneida County Medical Association expelled four physicians practicing under this title, and, as we understand, advertising their services to the laity. The expelled members appealed to the State Society and then secured a temporary injunction restraining the County Association from pressing charges. Judge Pardon C. Williams, Referee, has handed down the following opinion. On account of the general principles involved, it becomes a most valuable precedent in cases of ethics, all the more so because it does not decide the actual case presented. In this connection we may allude to the opinion of a physician on the staff of a somewhat similar advertising institution. He held that so long as he belonged to the institution, it would be unfair for him to accept membership in the regular medical organizations, even though others, similarly circumstanced had been admitted. He declared that he was performing his routine medical duties conscientiously, according to the best of his ability, and that he

intended, as soon as he was financially able, to enter private practice, when he hoped he would be admitted to the regular medical organization of the county and state. And we grasped his hand and told him he had the true conception of ethics.

"I do not pass upon or find as to the question of the plaintiff's guilt or innocence of charges against them.

"I decide as a matter of law:

"(1) The plaintiff having joined the defendant society and the state society subjects himself to their constitutions and by-laws with reference to the preferring of charges against their members and the investigation thereof and discipline therefor.

"(2) The censors of the defendant society having investigated the charges preferred against the plaintiff and reported thereon to the defendant society this court should not at this time inquire into such investigation and report or pass upon the question as to the correctness thereof.

"(3) The state society upon the plaintiff's appeal, having determined that the charges preferred against the plaintiff were within the contemplation of the by-laws of the defendant society and proper subjects for investigation and discipline, this court should not inquire or pass upon these questions.

"(4) This court should not restrain the defendant society from acting on the censor's report or from any particular action thereon and should not now inquire into or pass upon what action the defendant should take on the said report.

"(5) The defendant should have judgment dismissing the plaintiff's complaint and dissolving the temporary injunction with costs, and judgment is ordered accordingly."

CONSERVATIVE EFFECT OF INCREASED MATRICULATION REQUIREMENTS. The Annual Announcement of the University of Colorado contains the following significant statistics. Graduates, 1912, 39; enrollment, 1913, 53; 1914, 15; 1915, 9; 1916, 15. We take it that the increase in the class of 1913 was due to the endeavor to anticipate the more stringent requirement of two years of college work and that the sudden drop was due to the inforcement of the higher standard. There are two or three obvious morals to be drawn. Inadequately prepared men must not merely be shifted from one state to another, but every state and, especially, the wealthier eastern communities and the stronger colleges have a plain duty of raising their standards to the level of the western states. The marked reduction in attendance will act but very gradually and slowly, to restore the medical profession to an economic equilibrium. Medical education can no longer be carried on, generally, at a profit or even on a self-supporting basis but public or private philanthropy

must assist as well as control the medical colleges. We do not believe in dollar diplomacy in this regard. A school should survive, not as a matter of financial fitness but of fitness according to higher ethical standards.

NEW YORK STATE DEPARTMENT OF LABOR, Bureau of Statistics and Information.—Official Notice to Physicians.—By Chapter 145, Laws of 1913, two additional industrial diseases are required to be reported by physicians to this Department, viz, *poisoning by brass or wood alcohol*. The eight diseases which must now be reported are: Lead poisoning (plumbism), Phosphorus poisoning, Arsenic poisoning, Brass poisoning (brass founder's ague), Wood Alcohol poisoning, Mercury poisoning, Anthrax, Compressed air illness (caisson disease).

TYPHOID AND WATER SUPPLY. Attention is called to the very valuable special article in the *Jour. of the A. M. A.*, page 1702, May 31. Buffalo had a death rate of 11.4 per 100,000 for 1912; 25.1 for 1911; average 22.8 for 1906-10. The figures for Rochester were, respectively, 11.8, 10.3, 12.4; for Syracuse 16.8, 15.7, 15.7; for Albany, 17.7, 17.8, 17.5 (and will probably be much higher this year on account of the inundation of the filtration plant); for New York 9.8, 11.1, 13.8. According to the census of 1910 there were just fifty cities of over 100,000 population, aggregating 22 per cent. of the entire population of the country. Until recently, 25:100,000 typhoid mortality was considered fairly low and Pittsburgh averaged 74.3 from 1906 to 1910, but this has dropped to 12.7 since filtering the water for Pittsburgh proper, in fact, for this part of Greater Pittsburgh, the mortality for 1912 was only 5.9. The lowest rate has been maintained by Cambridge, Mass., 9.8 for 1906-10 down to 2.8 for 1912. Buffalo is, we believe, the only large city of the U. S. which maintains a fairly low rate on a supply of "raw" water and an ungarded watershed. Criticism of this statement is requested, but read it carefully. We believe that the actual, resident typhoid mortality of Buffalo is not much over half the amount stated, although a similar statement may perhaps be required for various other cities, and we believe that a good deal of the resident mortality is acquired from water drunk outside the city. A very careful study of the question of where the typhoid cases in Buffalo live and what water they have drunk, or how they have been exposed to other sources of infection, should be made before undertaking any expensive method of protecting the water supply.

HUSTED MILL EXPLOSION. During the afternoon of June 25, an explosion took place in the Husted Mill of Buffalo. One man was blown 500 feet in the air; the engineer and fireman of a passing locomotive were fatally injured; two others were killed either by fire or crushing. More than sixty men required hospital treatment for burns and traumatisms, and the total deaths will probably reach twenty-five. The building itself was fire proof, but, as in Baltimore, Philadelphia and New York, serious fires may occur in fire-proof buildings. As a layman well expressed it regarding the last, in which so many girls were burned to death, "it was like a fire in a stove." Fires of the present nature are, fortunately, rare and those first noted, a quarter of a century ago, were regarded as mysterious. It has, however, been demonstrated that grain dust of various kinds, in a state of fine subdivision and concentration becomes not only theoretically combustible by reason of its carbohydrate but actually inflammable and explosive—probably in analogy to the increase of combustibility and explosiveness of gasoline, kerosene, etc., when sprayed by a carburetor. It would be worth while for those interested in industrial prophylaxis to pay special attention to the contents of fire-proof buildings and to investigate and act upon the contention that dust-explosions are impossible if the air does not become surcharged with dust.

PERSONALS.

Announcements of removals, travel, and other matters of interest are requested. Please report any errors in the listing of any physician, in the State and other directories that we may co-operate with the State Society in securing a correct list of physicians.

Dr. A. Crandall Way of Perry was the guest of the editor in June.

Dr. James A. Hawley, a graduate of the Eclectic Medical College of Pennsylvania in 1862, and an old resident of Canandaigua, has retired from active practice.

Dr. Montgomery E. Leary of Rochester, served as Surgeon-General in charge of the Hospital and Ambulance Corps, during the Elks' Convention in Rochester in June.

Dr. G. Jeanneney of France, whose valuable work on venous anaesthesia was abstracted in our February issue, has received the gold medal of the Bordeaux Medical Society in recognition of his researches.

Dr. G. G. Reynolds of Nichols, N. Y., will sail shortly for an extended European trip.

Dr. Roland Meisenbach of Buffalo has been elected a corresponding member of the St. Louis Medical Society.

Dr. Catherine E. Kelley of Buffalo has removed to 441 Fargo avenue.

Dr. George M. Lewis of Buffalo has removed to 2198 Delaware avenue, Kenmore.

Dr. Charles B. Tweedale of Cheboygan was the sole out-of-town representative of the class of 1888, Buffalo, to attend the 25th reunion. For this reason we have decided not to devote the space to a description of this reunion, for which we had an excellent apology prepared, believing that the personal interest which we felt in it demanded an apology.

Dr. Augustus F. G. Zurhorst has been appointed Postmaster at Oakfield, N. Y.

Dr. R. M. Root of Buffalo will sail for Europe this month.

Dr. R. R. Ross, Supt. of the Buffalo General Hospital, will spend July and August in Europe.

OBITUARIES.

Readers are requested to report promptly the death of any physician in Western New York, or former residents of this region, or graduates of any medical school in Western New York and to call the attention of the families of the deceased, our desire to publish adequate obituary notices.

Dr. Milton Colt Belknap, New York Ecclectic 1868, died at his home after a lingering illness, May 22. He was born in Arcade in 1842. While a student in the Michigan Agricultural College in 1862, he enlisted in the 23d Michigan Infantry and served through the remainder of the Civil War. He practiced in Sinclairville and Brocton before coming to Mayville 21 years ago. He was a prominent Mason.

Dr. Edward B. Belknap, Buffalo 1892, of Wyoming, died at the Rochester General Hospital, May 12, of nephritis, aged 46.

Dr. Robert Watts Eastman, Buffalo 1879, born in Oswego in 1853, died at his home in New York City, May 5.

Dr. Samuel B. Baker of Rochester died Monday, May 26, 1913, of heart disease. He leaves a wife and two children. He was but 44 years of age. Born in Lima, N. Y., graduated in University of Buffalo, 1889, and thereupon settled in Rochester. He was a man of very genial, happy, retiring disposition, well liked, and having a very large practice.

Dr. John Richards, Eclectic of Pennsylvania, 1865, a resident of Marion, Wayne County, N. Y., died at Palmyra, May 21, aged 80.

SOCIETY MEETINGS.

Secretaries of County and other medical societies of western New York—Buffalo to Utica—are requested to send list of officers, and general information as to dates and places of meetings, so that they may be published in the August and September issues.

The Campaign Against Cancer

A National Anti-Cancer Association was organized at a meeting of physicians and laymen at the Harvard Club, Boston, May 22. Various national societies of specialists were represented. The following officers were elected: President, George C. Clark, New York; vice-Presidents, Dr. Clement Cleveland, New York; Dr. L. M. McMurtry, Louisville; Dr. Edward Reynolds, Boston; Dr. Edward Martin, Philadelphia; Dr. L. F. Barker, Baltimore; Secretary, T. M. Debevoise. The chairman of the Executive Committee is Dr. G. E. Brewer, New York, and other members of the committee are Drs. J. E. Simpson, Pittsburgh; Joseph Bloodgood, Baltimore; A. D. Bevan, Chicago; Jeff Miller, New Orleans; Charles Power, Denver; F. J. Taussig, St. Louis, and Reuben Peterson, Ann Arbor. There is also a laymen's committee, headed by James Speyer of New York.

Without wishing to place an obstacle in the way of any movement toward the prevention of disease, it ought to be clearly recognized that the time is not ripe to attack this problem from the standpoint of etiology except as laymen can be impressed with the importance of assisting research and of realizing the frank agnosticism of most of the profession in this regard and the fact that the profession is not to blame for its ignorance any more than any other science is to blame for having unsolved problems and limitations of knowledge. Neither is there any

method of treatment generally recognized as efficient except operation and certain radiant and caustic methods of limited applicability. Even under the best circumstances the practical results of treatment are less satisfactory than for many other diseases, even those till recently considered of bad prognosis. But the Association is needed to disseminate information as to the danger of neglecting early symptoms and of trusting to inefficient means of treatment by incompetent quacks and, along these lines, many valuable lives can be saved and much unnecessary suffering avoided.

MEDICAL SOCIETY OF ERIE COUNTY. The regular meeting was held June 16. After routine business the following papers were read: "Treatment of Breech Presentation," Dr. P. W. Van-Peyma; "Forests and Their Relationships to Eugenics," Dr. George N. Jack.

THE BUFFALO ACADEMY OF MEDICINE has elected the following officers for the year 1913-14:

Section of Medicine—Chairman, Dr. Herman K. De Groat; Secretary, Theodore M. Leonard.

Section of Surgery—Chairman, W. W. Plummer; Secretary, Dr. Charles W. Bethune.

Section of Gynaecology and Obstetrics—Chairman, Descum C. McKenney; Secretary, John A. Ragone.

Section of Pathology, Etc.—Chairman, A. A. Thibaudeau; Secretary, Bernard F. Schreiner.

General Academy Officers—President, Harry R. Trick; vice-Presidents, ex-officio, the Chairman of Sections; Secretary, Herbert A. Smith; Treasurer, Lawrence Hendee; Trustee, Thomas F. Duyer.

THE FOURTH INTERNATIONAL CONGRESS ON SCHOOL HYGIENE will meet in Buffalo Aug. 25-30. Two hundred and thirty papers and ten symposiums are promised. Let us trust that the curricula for school children will not be arranged on the same liberal basis. This plethora will doubtless be depleted before the final program is arranged. The medical profession is cordially invited to attend and to take a permanent interest in the organizations represented.

THE ELMIRA ACADEMY OF MEDICINE at its meeting of June 4 enjoyed the following program: "Indicated Remedies—Ecchinea, Cactus and Gelsemium," M. H. Potts, M. D.; "A Brief Resume of Medical Progress During the Past Twenty-five Years," La Rue Colgrove, M. D.; "The Modern Management of Some Everyday Obstetrical Problems," N. H. Soble, M. D.

Rochester, N. Y., May 25, 1913.

To the Legal Profession of this County:

Please observe that our society has again prepared a list of experts in insanity for another year. This list is the same as that of last year with one additional name. They are as follows: Edward B. Angell, Eveline P. Ballintine, Edward L. Hanes, Wallace J. Herriman, Eugene H. Howard, P. W. Neefus, Mary C. Nickerson, Sarah G. Pierson, Ezra B. Potter, Alvah C. Remington, Alexander L. Smith, C. A. Van der Beek, Willard H. Veeder and Irving Lee Walker.

Our society is convinced that attempts at the regulation of medical expert testimony may fail for some time to come, and so it has decided to attack the problem in a new way.

The names are first acted upon by our Board of Censors and then elected by the society by ballot after due notice, a two-thirds vote being required to elect. In this way our society feels that it can vouch for these experts. It vouches for no others at present.

You may, of course, use them or not, as you wish. However, the inference is that should you use others no blame can come to our profession because of any medico-legal scandals arising therefrom. Very sincerely,

CHARLES W. HENNINGTON,
Secretary Medical Society of the County of Monroe.

OUR CONTEMPORARIES

The *International Hospital Record* for April quotes our editorial on the Guarantee of Interneships, published in the same month, in full.

Collier's recently published a horrible story of white slavery of a bigamous wife who earned \$80 a week in a 50-cent house. The same story, published as fiction, would be considered by many readers to involve an incredible degree of villainy on the part of the husband, a purely imaginative system of securing white slaves, on account of the elaborate and expensive methods employed, and a degree of subservience and physical endurance on the part of the woman impossible in these days.

The neglected side of the problem.

Who?

To the Editor (of the *Survey*):

(On seeing the White Slave by Abastenia St. Leger Eberle.)

This is the man that sells women's souls into hell fire. Who is the buyer?

LOUISE W. KNEELAND.

This is a terrible arraignment. Ponder over it.

CORRESPONDENCE.

This department is intended for the presentation of news and views not coming within the scope of other departments, and particularly to afford opportunity for discussion and criticism of views elsewhere expressed.

Note From Our Oldest Subscriber

Three hundred years before Christ, Aristotle and the human race in general declared the human brain is so much stuffing to give shape to the cranium for appearance sake, but within the last century Gall and Spurzheim have launched the science of phrenology on the earth. I am convinced that there is much truth in it and that it cannot be eradicated from the earth. On page 645 of the *BUFFALO MEDICAL JOURNAL*, Vol. X, can be seen an article of mine on the production of sexes. In the same volume can be seen an article of mine on the constitutions and temperaments.

SILAS HUBBARD, M. D., E. Aurora.

ABSTRACTS.

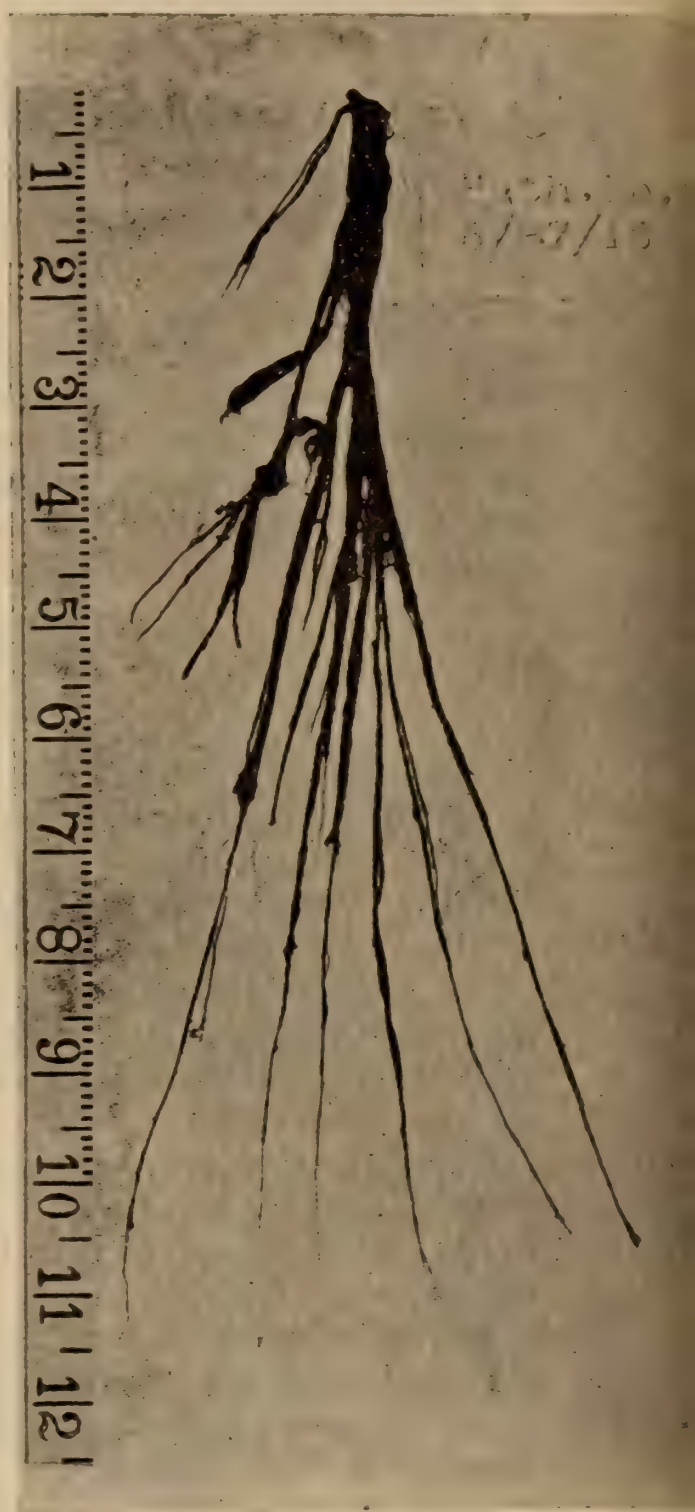
AVULSION OF NERVES IN FACIAL NEURALGIA WITH REPORT OF FOUR CASES, Herbert P. Cole, M. D., Mobile, Ala., *Charlotte Medical Journal*, April, 1913. (Plates used by courtesy of Editor.) Simple section of the nerve offers the least benefit of the minor operations. The high mortality rate in resection of the Gasserian ganglion always warrants our first attempting minor procedures for the relief of this condition. Many cases present grave lesions contra-indicating the radical Gasserian ganglion operation. Of the Gasserian operations apparently Murphy's extra-dural section of the ganglion with the interposition of a wax plate pressed into the foramen ovale appears to offer all the benefits of the Gasserian resection with a greatly reduced mortality rate.

The permanency of cure from the avulsion method depends not alone upon the thoroughness of the avulsion and whether or not the ganglion itself has become involved, but also upon the thoroughness with which we block the proximal nerve root to prevent the regeneration so prone to occur in all sensory nerves. The silver screw fixed in the infra orbital foramen offers a successful obstacle to the regeneration of the infra-orbital division. The supra-orbital stump has been successfully blocked by rolling it in a flap of frontal periosteum which may be rolled under the orbit. As yet we are unfamiliar with any method of blocking the roots of the inferior dental or lingual nerves.

Conclusion.—The temporary relief obtained in all of these cases in periods from seven to thirty-three months, together



SCHEME OF OPERATION.—Note that the supra-orbital branch is being slowly avulsed by twist-upon a hemostat. The proximal stump will be rolled up in a flap of frontal periosteum and placed under the roof of the orbit. A solid metal screw permanently plugs the infra-orbital foramen from which the infra-orbital branch has been avulsed.



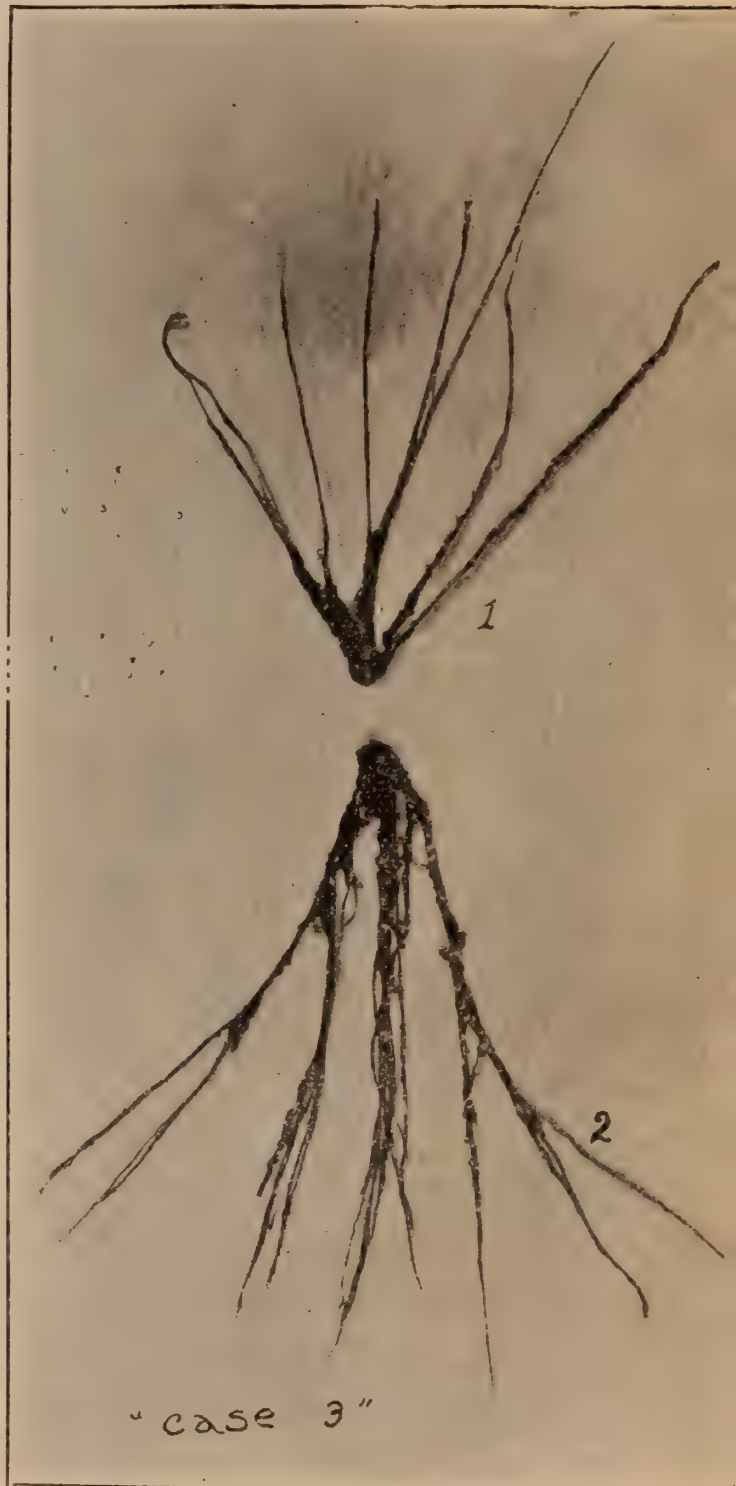
CASE 1.—Actual size of avulsed portion of infra-orbital nerve, 11½ cm. (4½ inch.)

with apparent permanent cure in one case operated on nearly three years ago, certainly justifies us in attempting this procedure in preference to the ganglion operation in cases of tri-facial neuralgia.

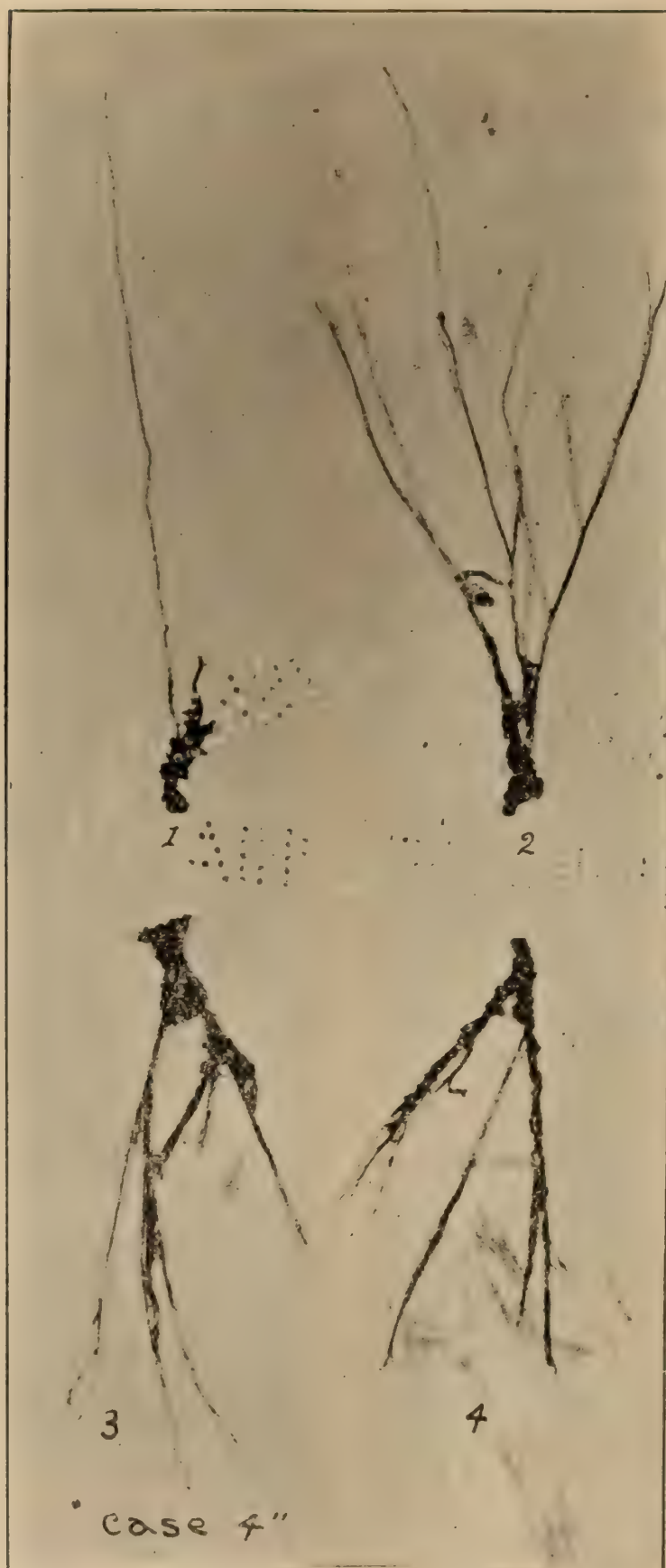
202 Conti street.



E 2.—Actual specimens—slightly reduced.
 Right infra-orbital nerve.
 Right supra-orbital nerve.
 Right inferior dental nerve.
 Right lingual nerve.



CASE 3.—Actual specimens—slightly reduced
 1. Left supra-orbital nerve.
 2. Left infra-orbital nerve.



CASE 4.—Actual specimen—slightly reduced.
1. Right supra-orbital nerve. Note that only one of the terminal divisions was avulsed.
2. Left supra-orbital nerve.
3. Right infra-orbital nerve.
4. Left infra-orbital nerve.

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- Digestive Organs, Chronic Disease Generally, Boardman Reed, 621, June.
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- Ectopic Pregnancy, Early Diagnosis of, John G. W. Knoll, 271, Dec.
- Eczema, Outline for Treatment, W. W. Quinton, 269, Dec.
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- Epilepsy, Symptomatic, E. A. Sharp, 580, May.
- Ethics and Professional Influence, Edit., 419, Feb.
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- Fly Swatting, Edit., 634, June.
- Fractures, Compound, Thew Wright, 1, Aug.

- Fracture of Atlas, Separation of Fragment, Extrusion Through Mouth, Case of Dr. James P. White, Roswell Park, 312, Jan.
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- Friedmann Curative and Prophylactic Vaccination, Dr. Hesse, 499, April.
- Gastric Haemorrhage, Parenchymatous, C. A. Ewald, 559, May.
- Gastro-intestinal Diseases, Medical vs. Surgical Treatment, Anthony Bassler, 524, April.
- Germ Diseases, Are They Practically Non-communicable? Edit., 524, April.
- Gestation, see Pregnancy.
- Graduating Class, To the, Edit., 588, May.
- Guarantee of Internships, Edit., 521, April.
- Haemorrhage, Parenchymatous Gastric, C. A. Ewald, 559, May.
- Happy New Year, Edit., 335, Jan.
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- Investments for Professional Men, John W. Van Allen, 564, May.
- Is Optometry the Practice of Medicine, F. Parke Lewis, 319, Jan.
- Isotonic Sea Water in Therapeutics, R. H. Stevens, 369, Feb.
- Kafir Orange, R. H. True, 665, June.
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- Knock Knee and Bow Leg, Operative Treatment, Prescott Le Breton, 503, April.
- Mammary Cancer, Charles W. Bonney, 71, Sept.
- Medical Education, Economic Considerations, Edit., 640, June.
- Medical vs. Surgical Means of Diagnosis and Treatment of Gastro-Intestinal Diseases, Anthony Bassler, 135, Oct.
- Mole, Relation to Malignant Disease of Skin, Joseph Spangenthal, 146, Oct.
- Mortality, Distribution of, Edit., 592, May.
- Much Neglected Branch of Dermatology, W. W. Quinton, 567, May.
- Munn, Dr. E. G., the Rochester Dermatologist, C. W. Hennington, 264, Dec.
- Necessity for Accurate Pre-operative Diagnosis and the Methods to be Employed in Intra-abdominal Lesions, Herman E. Hayd, 681, July.
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- Nipple, Primary Carcinoma of, Bernard F. Schreiner, 509, April.
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- Operative Treatment of Bow Leg and Knock Knee, Prescott Le Breton, 503, April.
- Optical Society of State of New York, Address before, Chas. F. Prentice, 314, Jan.
- Optometry, Is it the Practice of Medicine, F. Parke Lewis, 319, Jan.
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- Overcrowded Profession (1845) Edit., 232, Nov.
- Parenchymatous Gastric Haemorrhage, C. A. Ewald, 559, May.
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- Phipps, Henry Psychiatric Clinic, A. W. Hurd, 637, June.
- Phylacogen, Clinical Reports of Cases Treated with, F. C. Smith, 392, Feb.
- Physicians, Number in Europe, 532, April, in U. S., 360, Jan.
- Physicians, Statistics Regarding Schools of Practice, 715, July.
- Phthisiophobia or Red Tape, Edit., 710, July.
- Pituitary Extract, W. G. Doern, 78, Sept.
- Plaster Jackets, Portable Apparatus, Prescott Le Breton, 626, June.
- Platform, Our, Edit., 231, Nov.
- Pollution of Lakes and Rivers From Canadian Standpoint, Chas. A. Hodgetts, 307, Jan.
- Pollution of Water, Edit., 336, Jan.
- Portable Apparatus for Application of Plaster Jackets in Hyperextension, Prescott Le Breton, 626, June.
- Possibilities of Paternalism in Medicine, Edit., 106, Sept.
- Pregnancy, Early Diagnosis in Ectopic, John G. W. Knoll, 271, Dec.

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- Brockbank, E. M., *Children, Their Care and Management*, 186, Oct.
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- Buffalo State Hospital, 42d Annual Report, 543, April.
- Bulkley, L. Duncan, *Diet and Hygiene in Diseases of the Skin*, 498, March.
- Bythell, W. J. S., and Barclay, A. E., *X-ray Diagnosis and Treatment*, 185, Oct.
- Cabot, Richard C., *Physical Diagnosis*, 368, Jan.
- Canal Zone Medical Association, *Proceedings of*, 545, April.
- Carling, E. Rock, *Treatment after Operation*, 496, March.
- Catalogue of Medical and Surgical Works Published in the U. S., 240, Oct.
- Century of Population Growth in U. S., 365, Jan.
- Chetwood, Charles H., *The Practice of Urology*, 492, March.
- Clark, J. Bayard, *Essays on Genito-Urinary Subjects* 62, Aug.
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- Cropper, J. W., *Further Researches into Induced Cell Re-Production and Cancer*, 244, Nov.
- Dayton, Hughes, *Practice of Medicine*, 241, Nov.
- Dentists' Dairy, 546, April.
- DeLee, Joseph B., *Principles and Practice of Obstetrics*, 550, April.
- DeLorne, M. F., *Manual of Pharmacy for Physicians*, 249, Nov.
- DeWitt, Katherine, *Private Duty Nursing*, 670, June.
- Diagnostic Points in Gastro-Intestinal Disease, 498, March.
- Differential Diagnosis, 498, March.
- Durning-Lawrence, Sir Edwin, *The Shakespeare Myth*, 187, Oct.
- Ehrenfried, Albert, *Surgical After-Treatment*, 183, Oct.
- Emery, W. D'Este, *Clinical Bacteriology and haematology for Practitioners*, 248, Nov.
- Evans, Willmot, *Diseases of the Skin*, 494, March.
- Flint, Austin, *Manuel of Auscultation and Percussion*, 304, Nov.
- Fortescue-Brickdale, J. M., *Text Book for Nurses Anatomy, Physiology, Surgery and Medicine*, 60, Aug.
- Fox, Herbert, *Elementary, Bacteriological and Protozoology*, 242, Nov.
- Fowler, Russell S., *Operating Room and the Patient*, 671, June.
- Freeman, Leonard, *Skin Grafting*, 495, March.
- Gardner, William S., *a Text Book of Gynecology*, 123, Sept.
- Garrison, Fielding H., *a New Work on the History of Medicine*, 491, March.
- Gastro-Enterological Association, *Transactions of the 14th Annual Meeting*, 670, June.
- Greene, Robert H., *Diseases of the Genito-Urinary Organs and the Kidney*, 124, Sept.
- Groves, E. W., *Text Book for Nurses Anatomy, Physiology, Surgery and Medicine*, 60, Aug.
- Grulee, Clifford G., *Infant Feeding*, 184, Oct.
- Hare, Hobart A., *Progressive Medicine*, 248, Nov., 363, Jan.
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- Harrison, L. W., *Gonococcal Infections*, 126, Sept.
- Hart, Bernard, *Psychology of Insanity*, 364, Jan.
- Head, Gustavus P., *Practical Medicine Series*, 302, Dec., 548, April.
- Heisler, John C., *Practical Anatomy*, 249, Nov.
- Herringham, W. P., *Kidney Diseases*, 125, Sept.
- Hirst, Barton C., *Text Book of Obstetrics*, 305, Dec.
- Hirschman, Louis J., *Handbook of Diseases of the Rectum*, 494, March.
- Hooker, Albert H., *Chloride of Lime in Sanitation*, 544, April.
- Hrdlicks, Ales, *Bureau of Am. Ethnology*, 244, Nov.
- Hun, Henry, *Atlas of Differential Diagnosis of Diseases of the Nervous System*, 498, March.
- Infant Mortality and Milk Stations, 62, Aug.
- Jackson, George T., *a Treatise on Diseases of the Hair*, 245, Nov.
- Jamieson, W. Allan, *The Care of the Skin in Health*, 185, Oct.

- Keen, W. W., *Keen's Surgery*, 616, May.
- Kemp, Robert C., *Diseases of the Stomach, Intestines and Pancreas*, 301, Dec.
- Laboratory Data from the Department of Experimental Medicine, 492, Mar.
- Lewers, Arthur N. H., *Practical Text Book of the Diseases of Women*, 243, Nov.
- Lounsbery, Harriet C., *Making Good on Private Duty*, 240, Nov.
- Lydston, G. Frank, *The Blood of the Fathers*, 241, Nov.
- Lydston, G. Frank, *a Privileged Medical Class*, 669, June.
- McFarland, Joseph, *Text Book upon the Pathogenic Bacteria and Protozoa*, 304, Dec.
- McKisack, Henry L., *Systematic Case-Taking*, 667, June.
- McLaren, Archibald, *Transactions of the Am. Surgical Association*, Vol. 13, 436, Feb.
- Marchildon, John W., *The Wassermann Reaction*, 241, Nov.
- Marshall, C. Devereux, *Diseases of the Eye*, 436, Feb.
- Medical Directory of N. Y., N. J., and Conn., 250, Nov.
- Medical Record Visiting List, 303, Dec.
- Merck's Annual Report of Recent Advances in Pharmaceutical Chemistry and Therapeutics, 494, March.
- Miles, Alexander, *Manuel of Surgery*, 186, Oct.
- Mitchell, May, *Practical Medicine Series*, 363, Jan.
- Mix, Charles L., *Practical Medicine Series*, 302, Dec., 548, April.
- Morland, Egbert, *Tuberculin Treatment*, 126, Sept.
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- Mortality Statistics, 1909. 365, Jan.
- Moynihan, B. G. A., *Duodenal Ulcer*, 124, Sept.
- Muhlrad, Puccio y., *Anuario Medico Sud Americano*, 1912, 364, Jan.
- Mulzer, Paul, *Therapy of Syphilis*, 367, Jan.
- Murphy, John B., *Surgical Clinics*, 186, Oct., 301, Dec., 493, March, 669, June.
- Murphy, John B., *Contribution to the Surgery of Bones, Joints and Tendons*, 546, April.
- Murphy, J. Keogh, *Practitioner's Encyclopedia of Medicine and Surgery*, 246, Nov.
- Murrill, William, *What to do in Cases of Poisoning*, 183, Oct.
- Muscle Training in the Treatment of Infantile Paralysis, 547, April.
- New Towns and Business Opportunities, 615, May.
- N. Y. State Museum Bulletin, 244, Nov.
- Noeberg, Geo. B., *Golden Rules of Gynecology*, 615, May.
- Obstetric Charts in Colors, 122, Sept.
- Park, Roswell, *The Evil Eye, Thanatology and Other Essays*, 495, Mar.
- Peregrinus, Medicus, *Men, Manners and Medicine*, 548, April.
- Pickerill, H. P., *Stomatology in General Practice*, 61, Aug.
- Pilcher Hospital, *Year Book*, 300, Dec.
- Physician's Visiting List, 303, Dec.
- Polk's Medical Directory of North America. 1912, 360, Jan.
- Pollock, C. E., *Gonococcal Infections*, 126, Sept.
- Pottenger, Francis M., *Tuberculin in Diagnosis and Treatment*, 616, May.
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- Radasch, Henry E., *a Compend of Histology*, 494, March.
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- Riviere, Clive, *Tuberculin Treatment*, 126, Sept.
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- Rockwood, Elbert W., *Introduction to Chemical Analysis*, 547, April.

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- Ross, F. W. Forbes, Cancer, the Problem of its Genesis and Treatment, 497, March.
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- Schroeder, Henry H., Insurance Medicine, 671, June.
- Scmitz, Henry, Pathology and Treatment of Diseases of Women, 247, Nov.
- Scott, R. J. E., Gould and Pyle's Cyclopaedia of Practical Medicine and Surgery, 123, Sept.
- Scudder, Charles L., Tumors of the Jaws, 123, Sept.
- Shaw, George Berbard, Doctor's Dilemma, 668, June.
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- Simon, Charles E., An Introduction to the Study of Infection and Immunity, 302, Dec.
- Simon, W., Manuel of Chemistry, 245, Nov.
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- Starling, Ernest H., Principles of Human Physiology, 246, Nov.
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- Stedman, Thomas L., a Reference Handbook of the Medical Sciences, 491, March.
- Stevens, Thomas G., Diseases of Women, 549, April.
- Stimson, Lewis A., Treatise on Fractures and Dislocations, 302, Dec.
- Straus, Mrs. Lina G., Disease in Milk, the Remedy Pasteurization, 617, May.
- Sutherland, G. A., Treatment of Disease in Children, 497, March, 548, April.
- Sulzer's Short Speeches, 250, Nov.
- Sulzer's Message of Public Health With Report of Special Public Health Commission, 547, April.
- Stedman, Thomas L., Practical Medical Dictionary, 364, Jan.
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- Wallis, Sir Frederick, Surgery of the Rectum for Practitioners, 249, Nov.
- Webster, Ralph W., Diagnostic Methods Chemical, Bacteriological and Microscopical, 60, Nov.
- Whipham, T. Rowland C., The Medical Diseases of Children, 494, March.
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- Williams, B. G. R. and E. G. C., Laboratory Methods, with Special Reference to the Needs of the General Practitioner, 123, Sept.
- Wood, H. C., Jr., Pharmacology and Therapeutics, 247, Nov.
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